s

Set Items Description
S1 42 (7C10? OR 7B6?) (20N)(ANTIBOD? OR HYBRIDOMA? OR IMMUNOGLOB-ULIN? OR B7?)
S2 22 RD S1 (unique items)
? s (7C10? or 7B6?) (20n)(B7?)

26 7C10?
37 7B6?
18275 B7?
S3 1 (7C10? OR 7B6?) (20N)(B7?)
? t s3/7/all

3/7/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2001 BIOSIS. All rts. reserv.

12995073 BIOSIS NO.: 200100202222
Human B7.1-specific primatized antibodies and transfectomas expressing said antibodies.
AUTHOR: Anderson Darrell R(a); Brams Peter; Hanna Nabil; Shestowsky William S; Heard Cheryl
AUTHOR ADDRESS: (a)Escondido, CA**USA
JOURNAL: Official Gazette of the United States Patent and Trademark Office Patents 1238 (1):pNo Pagination Sep. 5, 2000
MEDIUM: e-file
ISSN: 0098-1133
DOCUMENT TYPE: Patent
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: The present invention relates to the identification of macaque antibodies to human B7.1 and B7.2 by screening of phage display libraries or monkey heterohybridomas obtained using B lymphocytes from **B7**.1 and/or **B7**.2 immunized monkeys. More specifically, the invention provides four monkey monoclonal antibodies **7B6**, 16C10, **7C10** and 20C9 which inhibit the **B7**:CD28 pathway and thereby function as effective immunosuppressants. The invention further provides the complete DNA and amino acid sequences of the light and heavy chain of three primatized antibodies derived from those monkey monoclonal antibodies which bind **B7**.1 and possibly **B7**.2, primatized **7C10**, primatized **7B6** and primatized 16C10. These primatized and monkey antibodies may be used as specific immunosuppressants, e.g., for the treatment of autoimmune diseases and to prevent organ transplant rejection.
? ds

Set Items Description
S1 42 (7C10? OR 7B6?) (20N)(ANTIBOD? OR HYBRIDOMA? OR IMMUNOGLOB-ULIN? OR B7?)
S2 22 RD S1 (unique items)
S3 1 (7C10? OR 7B6?) (20N)(B7?)

```
        S4      409  B7(20N)(EPITOPE?)
? s b7?(20n)(epitope?)(20n)(antibod?)

          18275  B7?
         162985  EPITOPE?
        1634225  ANTIBOD?
        S5      282  B7?(20N)(EPITOPE?)(20N)(ANTIBOD?)
? s s5 and (7c10 or 7B6)

         282  S5
          26  7C10
          36  7B6
        S6      0  S5 AND (7C10 OR 7B6)
? s s5 and review?

         282  S5
     2965331  REVIEW?
        S7      4  S5 AND REVIEW?
? s s5 and workshop?

         282  S5
       31602  WORKSHOP?
        S8      2  S5 AND WORKSHOP?
? rd s7

...completed examining records
        S9      2  RD S7 (unique items)
? rd s8

...completed examining records
       S10      2  RD S8 (unique items)
? t s10/7/all


 10/7/1      (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08378963   94348060   PMID: 7520767
  The B7-2 (B70) costimulatory molecule expressed by monocytes and
activated B lymphocytes is the CD86 differentiation antigen.
  Engel P; Gribben JG; Freeman GJ; Zhou LJ; Nozawa Y; Abe M; Nadler LM;
Wakasa H; Tedder TF
  Department of Immunology, Duke University Medical Center, Durham, NC
27710.
  Blood (UNITED STATES) Sep 1 1994, 84 (5) p1402-7, ISSN 0006-4971
Journal Code: A8G
  Contract/Grant No.: AI-26872, AI, NIAID; CA-34183, CA, NCI; CA-54464, CA,
NCI; +
  Languages: ENGLISH
  Document type: Journal Article
  Record type: Completed
  T-cell activation is initiated after T-cell receptor binding to antigen,
but also requires interactions between costimulatory molecules expressed on
antigen-presenting cells. An important costimulatory molecule expressed by
monocytes and activated B lymphocytes has been recently identified and
termed B7-2 or B70. Independently, a new Cluster of Differentiation was
defined in the Fifth International Leukocyte Differentiation Antigen
Workshop as CD86, a molecule predominantly expressed by monocytes and
activated B lymphocytes. In this study, the two monoclonal antibodies that
defined CD86, FUN-1 and BU-63, were shown to bind to cDNA transfected cells
expressing B7-2/B70. The FUN-1 monoclonal antibody also completely blocked
the costimulatory activity of B7-2/B70 in functional assays. Therefore, the
serologically defined CD86 differentiation antigen is the B7-2/B70
molecule.
  Record Date Created: 19940928
```

ds

Set	Items	Description
S1	42	(7C10? OR 7B6?) (20N)(ANTIBOD? OR HYBRIDOMA? OR IMMUNOGLOBULIN? OR B7?)
S2	22	RD S1 (unique items)

? s (7C10? or 7B6?) (20n)(B7?)

26	7C10?
37	7B6?
18275	B7?
S3 1	(7C10? OR 7B6?) (20N)(B7?)

? t s3/7/all

3/7/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

12995073 BIOSIS NO.: 200100202222
Human B7.1-specific primatized antibodies and transfectomas expressing said antibodies.
AUTHOR: Anderson Darrell R(a); Brams Peter; Hanna Nabil; Shestowsky William S; Heard Cheryl
AUTHOR ADDRESS: (a)Escondido, CA**USA
JOURNAL: Official Gazette of the United States Patent and Trademark Office Patents 1238 (1):pNo Pagination Sep. 5, 2000
MEDIUM: e-file
ISSN: 0098-1133
DOCUMENT TYPE: Patent
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: The present invention relates to the identification of macaque antibodies to human B7.1 and B7.2 by screening of phage display libraries or monkey heterohybridomas obtained using B lymphocytes from **B7**.1 and/or **B7**.2 immunized monkeys. More specifically, the invention provides four monkey monoclonal antibodies **7B6**, 16C10, **7C10** and 20C9 which inhibit the **B7**:CD28 pathway and thereby function as effective immunosuppressants. The invention further provides the complete DNA and amino acid sequences of the light and heavy chain of three primatized antibodies derived from those monkey monoclonal antibodies which bind **B7**.1 and possibly **B7**.2, primatized **7C10**, primatized **7B6** and primatized 16C10. These primatized and monkey antibodies may be used as specific immunosuppressants, e.g., for the treatment of autoimmune diseases and to prevent organ transplant rejection.
? ds

Set	Items	Description
S1	42	(7C10? OR 7B6?) (20N)(ANTIBOD? OR HYBRIDOMA? OR IMMUNOGLOBULIN? OR B7?)
S2	22	RD S1 (unique items)
S3	1	(7C10? OR 7B6?) (20N)(B7?)

? s b7(20n)(epitope?)

14199	B7
162985	EPITOPE?

Record Date Created: 19921007
? s (b7?) and autoimmun?

```
          18275  B7?
         174736  AUTOIMMUN?
     S11    1107  (B7?) AND AUTOIMMUN?
```
? s s11 and review?

```
           1107  S11
        2965331  REVIEW?
     S12      96  S11 AND REVIEW?
```
? rd s12

...examined 50 records (50)
...completed examining records
```
     S13      73  RD S12 (unique items)
```
? t s13/3/all

13/3/1 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2001 BIOSIS. All rts. reserv.

12181396 BIOSIS NO.: 199900476245
Differential requirements of naive and memory T cells for CD28 costimulation in **autoimmune** pathogenesis.
AUTHOR: Perrin P J(a); Lovett-Racke A; Phillips S M; Racke M K
AUTHOR ADDRESS: (a)Department of Medicine, University of Pennsylvania, 909 BRB II, 421 Curie Boulevard, Philadelphia, PA, 19104-6160**USA
JOURNAL: Histology and Histopathology 14 (4):p1269-1276 Oct., 1999
ISSN: 0213-3911
DOCUMENT TYPE: Literature Review
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

13/3/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2001 BIOSIS. All rts. reserv.

12150299 BIOSIS NO.: 199900445148
Multiple sclerosis : Pathology and pathogenesis.
AUTHOR: Prasad Rameshwar(a); Prasad Roli(a); Wacek Bartholomew(a); Chandran Rajeswari(a); Ilangovan Saroja(a)
AUTHOR ADDRESS: (a)Department of Pathology, University of Illinois at Chicago, 1819 West Polk Street, Chicago, IL, 60612-7335**USA
JOURNAL: Proceedings of the National Academy of Sciences India Section B (Biological Sciences) 68 (3-4):p189-198 1998
ISSN: 0369-8211
DOCUMENT TYPE: Literature Review
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

13/3/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2001 BIOSIS. All rts. reserv.

11729727 BIOSIS NO.: 199800511458
Endothelial cells as antigen-presenting cells: Role in human transplant rejection.
AUTHOR: Rose M L(a)
AUTHOR ADDRESS: (a)National Heart Lung Inst., Imperial Coll. Sch. Med., Heart Sci. Centre, Harefield Hosp., Harefie**UK
JOURNAL: CMLS Cellular and Molecular Life Sciences 54 (9):p965-978 Sept., 1998
ISSN: 1420-682X
DOCUMENT TYPE: Literature Review
RECORD TYPE: Abstract
LANGUAGE: English

13/3/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

11669616 BIOSIS NO.: 199800451347
Targeting the **B7** /CD28: CTLA-4 costimulatory system in CNS **autoimmune** disease.
AUTHOR: Karandikar Nitin J; Vanderlugt Carol L; Bluestone Jeffrey A; Miller Stephen D(a)
AUTHOR ADDRESS: (a)Dep. Microbiol.-Immunol. Interdepartmental Immunobiol. Cent., North Western Univ. Med. Sch., 303**USA
JOURNAL: Journal of Neuroimmunology 89 (1-2):p10-18 Aug. 14, 1998
ISSN: 0165-5728
DOCUMENT TYPE: Literature Review
RECORD TYPE: Abstract
LANGUAGE: English

13/3/5 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

11117657 BIOSIS NO.: 199799738802
The CD28-**B7** costimulatory pathway and its role in **autoimmune** disease.
AUTHOR: Daikh David; Wofsy David; Imboden John B(a)
AUTHOR ADDRESS: (a)Box 0868, Univ. California, San Francisco, CA 94143**USA
JOURNAL: Journal of Leukocyte Biology 62 (2):p156-162 1997
ISSN: 0741-5400
DOCUMENT TYPE: Literature Review
RECORD TYPE: Abstract
LANGUAGE: English

13/3/6 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09812931 BIOSIS NO.: 199598267849
Potential roles of the **B7** and CD28 receptor families in **autoimmunity** and immune evasion.
AUTHOR: Harlan David M(a); Abe Ryo; Lee Kelvin P; June Carl H
AUTHOR ADDRESS: (a)Immune Cell Biol. Program, Naval Med. Res. Inst., Bethesda, MD 20889**USA
JOURNAL: Clinical Immunology and Immunopathology 75 (2):p99-111 1995
ISSN: 0090-1229
DOCUMENT TYPE: Literature Review
RECORD TYPE: Abstract
LANGUAGE: English

13/3/7 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

11227672 EMBASE No: 2001242199
Costimulatory molecules and their ligands as therapeutic targets in **autoimmune** disease
Zoller M.
M. Zoller, Department of Tumor Progression, German Cancer Research Center, University of Karlsruhe, Im Neuenheimer Feld 280, D 69120 Heidelberg Germany
AUTHOR EMAIL: m.zoeller@dkfz.de
European Journal of Dermatology (EUR. J. DERMATOL.) (France) 2001, 11/4 (335-342)
CODEN: EJDEE ISSN: 1167-1122
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 145

13/3/8 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

11186618 EMBASE No: 2001200214
IDEC-114 IDEC
Schopf R.E.
R.E. Schopf, Johannes Gutenberg University, Department of Dermatology, 55101 Mainz Germany
AUTHOR EMAIL: schopf@hautlink.klink.uni-mainz.de
Current Opinion in Investigational Drugs (CURR. OPIN. INVEST. DRUGS) (United Kingdom) 2001, 2/5 (635-638)
CODEN: CIDRE ISSN: 0967-8298
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 28

13/3/9 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE

11138264 EMBASE No: 2001154628
Complexities of CD28/**B7**: CTLA-4 costimulatory pathways in **autoimmunity** and transplantation
Salomon B.; Bluestone J.A.
J.A. Bluestone, UCSF Diabetes Center, University of California, San Francisco, CA 94143-0540 United States
AUTHOR EMAIL: jbluest@diabetes.ucsfedu
Annual Review of Immunology (ANNU. REV. IMMUNOL.) (United States) 2001, 19/- (225-252)
CODEN: ARIMD ISSN: 0732-0582
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 163

13/3/10 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE

11117535 EMBASE No: 2001089505
Modulation of the immune response through 4-1bb
Sica G.; Chen L.

G. Sica, Department of Immunology, Mayo Clinic 200 First Street, Southwest Rochester, MN 55905 United States
Advances in Experimental Medicine and Biology (ADV. EXP. MED. BIOL.) (United States) 2000, 465/- (355-362)
CODEN: AEMBA ISSN: 0065-2598
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 31

13/3/11 (Item 5 from file: 73)
DIALOG(R)File 73:EMBASE

11077051 EMBASE No: 2001090820
The role of macrophages in immune-mediated damage to the peripheral nervous system
Kiefer R.; Kieseier B.C.; Stoll G.; Hartung H.-P.
R. Kiefer, Department of Neurology, Westfalische Wilhelms-Universitat, Albert-Schweitzer-Strasse 33, D-48129 Munster Germany
AUTHOR EMAIL: kieferr@uni-muenster.de
Progress in Neurobiology (PROG. NEUROBIOL.) (United Kingdom) 2001, 64/2 (109-127)
CODEN: PGNBA ISSN: 0301-0082
PUBLISHER ITEM IDENTIFIER: S0301008200000605
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 214

13/3/12 (Item 6 from file: 73)
DIALOG(R)File 73:EMBASE

11066652 EMBASE No: 2001085694
Tolerance and **autoimmunity**
Kamradt T.; Avrion Mitchison N.
Dr. T. Kamradt, Deutsches Rheumaforschungszentrum, Schumannstr. 21/22, 10117 Berlin Germany
AUTHOR EMAIL: kamradt@drfz.de
New England Journal of Medicine (NEW ENGL. J. MED.) (United States) 01 MAR 2001, 344/9 (655-664)
CODEN: NEJMA ISSN: 0028-4793
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 151

13/3/13 (Item 7 from file: 73)
DIALOG(R)File 73:EMBASE

10994642 EMBASE No: 2001039391
Mast cells as initiators of immunity and host defense
Henz B.M.; Maurer M.; Lippert U.; Worm M.; Babina M.
Prof. Dr. B.M. Henz, Department of Dermatology, Charite, Campus Virchow, Humboldt University, Augustenburgerplatz 1, 13344 Berlin Germany
AUTHOR EMAIL: magdalena.fuchs@@@charite.de
Experimental Dermatology (EXP. DERMATOL.) (Denmark) 2001, 10/1 (1-10)
CODEN: EXDEE ISSN: 0906-6705
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 102

13/3/14 (Item 8 from file: 73)
DIALOG(R)File 73:EMBASE

10993861 EMBASE No: 2001038222
T lymphocyte costimulatory molecules in host defense and immunologic diseases
Tamada K.; Chen L.
Dr. L. Chen, Department of Immunology, Guggenheim 3, Mayo Clinic, 200 First St SW, Rochester, MN 55905 United States
Annals of Allergy, Asthma and Immunology (ANN. ALLERGY ASTHMA IMMUNOL.) (United States) 2000, 85/3 (164-174)
CODEN: ALAIF ISSN: 1081-1206
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 140

13/3/15 (Item 9 from file: 73)
DIALOG(R)File 73:EMBASE

10927362 EMBASE No: 1998331678
T-cell anergy and altered t-cell receptor signaling: Effects on **autoimmune** disease
Salojin K.V.; Zhang J.; Madrenas J.; Delovitch T.L.
K.V. Salojin, Autoimmunity/Diabetes Group, Dept of Microbiology, University of Western Ontario, London, Ont. N6A 5K8 Canada
AUTHOR EMAIL: del@rri.on.ca
Immunology Today (IMMUNOL. TODAY) (United Kingdom) 1998, 19/10 (468-473)
CODEN: IMTOD ISSN: 0167-5699
PUBLISHER ITEM IDENTIFIER: S0167569998013267
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 71

13/3/16 (Item 10 from file: 73)
DIALOG(R)File 73:EMBASE

10852352 EMBASE No: 2000333878
The role of CD40 in peripheral T cell tolerance and immunity
Diehl L.; Den Boer A.T.; Van der Voort E.I.H.; Melief C.J.M.; Offringa R.; Toes R.E.M.
L. Diehl, Dept. Immunohematol. Blood Transfus., Medical Center, Leiden University, Albinusdreef 2, 2333 ZA Leiden Netherlands
Journal of Molecular Medicine (J. MOL. MED.) (Germany) 2000, 78/7 (363-371)
CODEN: JMLME ISSN: 0946-2716
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 75

13/3/17 (Item 11 from file: 73)
DIALOG(R)File 73:EMBASE

10844662 EMBASE No: 2000320786
Restricted usage of T-cell receptor Vgamma-Vdelta genes and expression of costimulatory molecules in Takayasu's arteritis
Seko Y.; Takahashi N.; Tada Y.; Yagita H.; Okumura K.; Nagai R.; Virgin; Sharma; Miyazawa; Numano; Tanaka; Kimura

Y. Seko, Dept. of Cardiovascular Medicine, Graduate School of Medicine, University of Tokyo, Tokyo 113-8655 Japan
AUTHOR EMAIL: sekoyosh-tky@umin.ac.jp
International Journal of Cardiology (INT. J. CARDIOL.) (Ireland) 31 AUG 2000, 75/SUPPL. 1 (S77-S83+S85-S87)
CODEN: IJCDD ISSN: 0167-5273
PUBLISHER ITEM IDENTIFIER: S0167527300001947
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 33

13/3/18 (Item 12 from file: 73)
DIALOG(R)File 73:EMBASE

10735208 EMBASE No: 2000214674
The genetics of Hashimoto's disease
Barbesino G.; Chiovato L.
Dr. G. Barbesino, Department of Endocrinology, University of Pisa, Via Paradisa 2, Pisa I-56124 Italy
AUTHOR EMAIL: zipeppe@tin.it
Endocrinology and Metabolism Clinics of North America (ENDOCRINOL. METAB. CLIN. NORTH AM.) (United States) 2000, 29/2 (357-374)
CODEN: ECNAE ISSN: 0889-8529
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 114

13/3/19 (Item 13 from file: 73)
DIALOG(R)File 73:EMBASE

10735202 EMBASE No: 2000214668
The genetics of Graves' disease
Gough S.C.L.
Dr. S.C.L. Gough, Division of Medical Sciences, Birmingham Heartlands Hospital, Bordesley Green East, Birmingham B9 5SS United Kingdom
AUTHOR EMAIL: s.c.gough@bham.ac.uk
Endocrinology and Metabolism Clinics of North America (ENDOCRINOL. METAB. CLIN. NORTH AM.) (United States) 2000, 29/2 (255-266)
CODEN: ECNAE ISSN: 0889-8529
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 53

13/3/20 (Item 14 from file: 73)
DIALOG(R)File 73:EMBASE

10731840 EMBASE No: 2000141343
Molecular aspects in the pathogenesis of human systemic lupus erythematosus
Liossis S.-N.C.; Tsokos G.C.
Dr. G.C. Tsokos, Department of Clinical Physiology, Walter Reed Army Inst. of Research, Bldg. 40, Washington, DC 20307-5100 United States
AUTHOR EMAIL: gtsokos@usa.net
Archivum Immunologiae et Therapiae Experimentalis (ARCH. IMMUNOL. THER. EXP.) (Poland) 2000, 48/1 (11-19)
CODEN: AITEA ISSN: 0004-069X
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 57

13/3/21 (Item 15 from file: 73)
DIALOG(R)File 73:EMBASE

10658832 EMBASE No: 2000134072
Primary biliary cirrhosis: An orchestrated immune response against epithelial cells
Gershwin M.E.; Ansari A.A.; Mackay I.R.; Nakanuma Y.; Nishio A.; Rowley M.J.; Coppel R.L.
M.E. Gershwin, Division of Rheumatology/Allergy, Univ. California School of Medicine, TB 192, Davis, CA 95616 United States
AUTHOR EMAIL: megershwin@ucdavis.edu
Immunological Reviews (IMMUNOL. REV.) (Denmark) 2000, 174/- (210-225)
CODEN: IMRED ISSN: 0105-2896
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

13/3/22 (Item 16 from file: 73)
DIALOG(R)File 73:EMBASE

10653618 EMBASE No: 2000119397
The role of costimulatory molecules as targets for new immunosuppressives in transplantation
Kishimoto K.; Dong V.M.; Sayegh M.H.
M.H. Sayegh, Lab. Immunogenetic Transprantation, Brigham and Women's Hospital, 75 Francis Street, Boston, MA, 02115 United States
AUTHOR EMAIL: msayegh@rics.bwh.harvard.edu
Current Opinion in Urology (CURR. OPIN. UROL.) (United Kingdom) 2000, 10/2 (57-62)
CODEN: CUOUE ISSN: 0963-0643
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 49

13/3/23 (Item 17 from file: 73)
DIALOG(R)File 73:EMBASE

10630656 EMBASE No: 2000096021
Role of costimulatory molecules in **autoimmunity**
Kobata T.; Azuma M.; Yagita H.; Okumura K.
T. Kobata, Division of Immunology, Institute for Medical Science, Dokkyo University, 880 Kitakobayashi, Mibu, Tochigi 321-0293 Japan
AUTHOR EMAIL: tkobata@dokkyomed.ac.jp
Reviews in Immunogenetics (REV. IMMUNOGEN.) (Denmark) 2000, 2/1 (74-80)
CODEN: RVIMF ISSN: 1398-1714
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 66

13/3/24 (Item 18 from file: 73)
DIALOG(R)File 73:EMBASE

10618850 EMBASE No: 2000084275
Immune response and immunopathology of the inner ear: An update
Garcia Berrocal J.R.; Ramirez-Camacho R.
J.R. Garcia Berrocal, Servicio de Otorrinolaringologia, Clinica Puerta de

Hierro, San Martin de Porres 4, 28035 Madrid Spain
Journal of Laryngology and Otology (J. LARYNGOL. OTOL.) (United Kingdom) 2000, 114/2 (101-107)
CODEN: JLOTA ISSN: 0022-2151
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 36

13/3/25 (Item 19 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

10581396 EMBASE No: 2000045784
Animal models of myasthenia gravis
Christadoss P.; Poussin M.; Deng C.
P. Christadoss, Dept. of Microbiology and Immunology, University of Texas Medical Branch, Galveston, TX 77555-1070 United States
Clinical Immunology (CLIN. IMMUNOL.) (United States) 2000, 94/2 (75-87)
CODEN: CLIIF ISSN: 1521-6616
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 109

13/3/26 (Item 20 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

10561079 EMBASE No: 2000025912
Molecular pathogenesis of multiple sclerosis
Bar-Or A.; Oliveira E.M.L.; Anderson D.E.; Hafler D.A.
D.A. Hafler, Center for Neurologic Diseases, Brigham and Women's Hospital, Harvard Medical School, 77 Avenue Louis Pasteur, Boston, MA 02115-5187 United States
AUTHOR EMAIL: hafler@cnd.bwh.harvard.edu
Journal of Neuroimmunology (J. NEUROIMMUNOL.) (Netherlands) 1999, 100/1-2 (252-259)
CODEN: JNRID ISSN: 0165-5728
PUBLISHER ITEM IDENTIFIER: S0165572899001939
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 96

13/3/27 (Item 21 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

10531093 EMBASE No: 1999415701
The **B7**-CD28/CTLA-4 costimulatory pathways in **autoimmune** disease of the central nervous system
Anderson D.E.; Sharpe A.H.; Hafler D.A.
D.E. Anderson, Medical Microbiology and Immunology, University CA Davis School Medicine, Tupper Hall, Davis, CA 95616 United States
AUTHOR EMAIL: deanderson@ucdavis.edu
Current Opinion in Immunology (CURR. OPIN. IMMUNOL.) (United Kingdom) 1999, 11/6 (677-683)
CODEN: COPIE ISSN: 0952-7915
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 36

13/3/28 (Item 22 from file: 73)
DIALOG(R)File 73:EMBASE

07791971 EMBASE No: 1999275111
Adhesion and lymphocyte costimulatory molecules in systemic rheumatic diseases
Sfikakis P.P.; Mavrikakis M.
Dr. P.P. Sfikakis, 3 Amaryllidos Str., 154 52 Athens Greece
AUTHOR EMAIL: psfikaki@otenet.gr
Clinical Rheumatology (CLIN. RHEUMATOL.) (Belgium) 1999, 18/4 (317-327)
CODEN: CLRHD ISSN: 0770-3198
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 129

13/3/29 (Item 23 from file: 73)
DIALOG(R)File 73:EMBASE

07723810 EMBASE No: 1999200181
CTLA-4 and T cell activation
Oosterwegel M.A.; Greenwald R.J.; Mandelbrot D.A.; Lorsbach R.B.; Sharpe A.H.
M.A. Oosterwegel, Immunology Research Division, Department of Pathology, Brigham and Women's Hospital, 221 Longwood Avenue, Boston, MA 02115 United States
AUTHOR EMAIL: moosterwegel@rics.bwh.harvard.edu
Current Opinion in Immunology (CURR. OPIN. IMMUNOL.) (United Kingdom) 1999, 11/3 (294-300)
CODEN: COPIE ISSN: 0952-7915
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 52

13/3/30 (Item 24 from file: 73)
DIALOG(R)File 73:EMBASE

07708000 EMBASE No: 1999190730
Mucosal immunity and inflammation I. Mucosal dendritic cells: Their specialized role in initiating T cell responses
Iwasaki A.; Kelsall B.L.
B.L. Kelsall, National Institutes of Health, Bldg. 10, 10 Center Dr., Bethesda, MD 20892-1890 United States
AUTHOR EMAIL: kelsall@nih.gov
American Journal of Physiology - Gastrointestinal and Liver Physiology (AM. J. PHYSIOL. GASTROINTEST. LIVER PHYSIOL.) (United States) 1999, 276/5 39-5 (G1074-G1078)
CODEN: APGPD ISSN: 0193-1857
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 24

13/3/31 (Item 25 from file: 73)
DIALOG(R)File 73:EMBASE

07436926 EMBASE No: 1998327854
CD28/**B7** costimulation: A **review**
Greenfield E.A.; Nguyen K.A.; Kuchroo V.K.

E.A. Greenfield, Department of Adult Oncology, Dana Farber Cancer Institute, Boston, MA 02115 United States
Critical Reviews in Immunology (CRIT. REV. IMMUNOL.) (United States) 1998, 18/5 (389-418)
CODEN: CCRID ISSN: 1040-8401
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 229

13/3/32 (Item 26 from file: 73)
DIALOG(R)File 73:EMBASE

07413604 EMBASE No: 1998320503
Costimulatory molecles, CD 80 and CD 86
Takasaki Y.
Ryumachi (RYUMACHI) (Japan) 1998, 38/4 (623-630)
CODEN: RYMCA ISSN: 0300-9157
DOCUMENT TYPE: Journal; Review
LANGUAGE: JAPANESE
NUMBER OF REFERENCES: 45

13/3/33 (Item 27 from file: 73)
DIALOG(R)File 73:EMBASE

07299384 EMBASE No: 1998199909
The cellular biology of B-cell chronic lymphocytic leukemia
Jurlander J.
J. Jurlander, Department of Hematology, Finsencenter, Rigshospitalet, 2100 Copenhagen Denmark
Critical Reviews in Oncology/Hematology (CRIT. REV. ONCOL. HEMATOL.) (Ireland) 1998, 27/1 (29-52)
CODEN: CCRHE ISSN: 1040-8428
PUBLISHER ITEM IDENTIFIER: S1040842897100087
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 266

13/3/34 (Item 28 from file: 73)
DIALOG(R)File 73:EMBASE

07290418 EMBASE No: 1998173817
T-cell activation in **autoimmune** and inflammatory diseases
Perkins D.L.
Dr. D.L. Perkins, Brigham and Women's Hospital, Lab. of Immunogen./Transplantation, 75 Francis Street, Boston, MA 02115 United States
Current Opinion in Nephrology and Hypertension (CURR. OPIN. NEPHROL. HYPERTENS.) (United Kingdom) 1998, 7/3 (297-303)
CODEN: CNHYE ISSN: 1062-4821
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 56

13/3/35 (Item 29 from file: 73)
DIALOG(R)File 73:EMBASE

07234030 EMBASE No: 1998118323

Immunopathology of Sjogren's syndrome
Tapinos N.I.; Polihronis M.; Tzioufas A.G.; Skopouli F.N.
N.I. Tapinos, Department of Pathophysiology, School of Medicine, University of Athens, M. Asias 75, Goudi 115 27, Athens Greece
Annales de Medecine Interne (ANN. MED. INTERNE) (France) 1998, 149/1 (17-24)
CODEN: AMDIB ISSN: 0003-410X
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH; FRENCH
NUMBER OF REFERENCES: 69

13/3/36 (Item 30 from file: 73)
DIALOG(R)File 73:EMBASE

07059341 EMBASE No: 1997341197
Dendritic cells: Unique leukocyte populations which control the primary immune response
Hart D.N.J.
Dr. D.N.J. Hart, HIT Medicine Research Group, Canterbury Health Laboratories, PO Box 151, Christchurch New Zealand
Blood (BLOOD) (United States) 1997, 90/9 (3245-3287)
CODEN: BLOOA ISSN: 0006-4971
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 545

13/3/37 (Item 31 from file: 73)
DIALOG(R)File 73:EMBASE

07033895 EMBASE No: 1997314155
Lymphocytes, cytokines, inflammation, and immune trafficking
Tsokos G.C.; Kovacs B.; Liossis S.-N.C.
Dr. G.C. Tsokos, Department of Clinical Physiology, Walter Reed Army Institute Research, Washington, DC 20307-5100 United States
Current Opinion in Rheumatology (CURR. OPIN. RHEUMATOL.) (United States) 1997, 9/5 (380-386)
CODEN: CORHE ISSN: 1040-8711
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 57

13/3/38 (Item 32 from file: 73)
DIALOG(R)File 73:EMBASE

06994545 EMBASE No: 1997280717
Targeting **B7**: CD28 Cco-stimulation in the tratment of **autoimmune** demyelination
Perrin P.J.; Racke M.K.
Dr. P.J. Perrin, Dept, of Neurology, University of Pennsylvania, 3 W. Gates Building, Philadelphia, PA 19104-4283 United States
Drug News and Perspectives (DRUG NEWS PERSPECT.) (Spain) 1997, 10/4 (208-213)
CODEN: DNPEE ISSN: 0214-0934
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 56

13/3/39 (Item 33 from file: 73)

DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

06728631 EMBASE No: 1997010093
The complexities of T-Cell Co-stimulation: CD28 and beyond
Sperling A.I.; Bluestone J.A.
Dr. J.A. Bluestone, Ben May Insitute for Cancer Research, MC 1089, University of Chicago, 5841 S Maryland Ave, Chicago, IL 60637 United States
Immunological Reviews (IMMUNOL. REV.) (Denmark) 1996, -/153 (155-182)
CODEN: IMRED ISSN: 0105-2896
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 93

13/3/40 (Item 34 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

06725737 EMBASE No: 1997007199
Virus-induced **autoimmune** disease
Von Herrath M.G.; Oldstone M.B.A.
M.G. Von Herrath, Scripps Research Institute, Department of Neuropharmacology, Division of Virology, 10666 North Torrey Pines Road, La Jolla, CA 92037 United States
AUTHOR EMAIL: mbaobo@scripps.edu
Current Opinion in Immunology (CURR. OPIN. IMMUNOL.) (United Kingdom) 1996, 8/6 (878-885)
CODEN: COPIE ISSN: 0952-7915
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 73

13/3/41 (Item 35 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

06725729 EMBASE No: 1997007191
Costimulation and **autoimmunity**
Tivol E.A.; Schweitzer A.N.; Sharpe A.H.
E.A. Tivol, Blood Center Southeastern Wisconsin, Milwaukee, WI 53201-2178 United States
AUTHOR EMAIL: btivol@smtpgate.bcsew.edu
Current Opinion in Immunology (CURR. OPIN. IMMUNOL.) (United Kingdom) 1996, 8/6 (822-830)
CODEN: COPIE ISSN: 0952-7915
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 66

13/3/42 (Item 36 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

06718103 EMBASE No: 1996229863
HLA-derived peptides as a strategy for the prevention of allograft rejection
Krensky A.M.; Clayberger C.
Dr. A.M. Krensky, Stanford University Medical Center, Stanford, CA-94305-5119 United States
Expert Opinion on Investigational Drugs (EXPERT OPIN. INVEST. DRUGS) (United Kingdom) 1996, 5/7 (809-818)

CODEN: EOIDE ISSN: 1354-3784
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

13/3/43 (Item 37 from file: 73)
DIALOG(R)File 73:EMBASE

06711305 EMBASE No: 1996376261
Is there an immunogenetic basis for Peyronie's disease?
Leffell M.S.
Department of Medicine, School of Hygiene and Public Health, Johns Hopkins University,Baltimore, MD United States
Journal of Urology (J. UROL.) (United States) 1997, 157/1 (295-297)
CODEN: JOURA ISSN: 0022-5347
DOCUMENT TYPE: Journal; Conference Paper
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

13/3/44 (Item 38 from file: 73)
DIALOG(R)File 73:EMBASE

06664465 EMBASE No: 1996329346
Costimulatory **B7** molecules in the pathogenesis of infectious and **autoimmune** diseases
Reiser H.; Stadecker M.J.
Department of Pathology, Tufts University School of Medicine, 136 Harrison Ave.,Boston, MA 02111 United States
New England Journal of Medicine (NEW ENGL. J. MED.) (United States) 1996, 335/18 (1369-1377)
CODEN: NEJMA ISSN: 0028-4793
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH

13/3/45 (Item 39 from file: 73)
DIALOG(R)File 73:EMBASE

06567235 EMBASE No: 1996228611
Role of the CD28-**B7** costimulatory pathways in T cell-dependent B cell responses
Hathcock K.S.; Hodes R.J.
Experimental Immunology Branch, National Cancer Institute, National Institutes of Health,Bethesda, MD 20892 United States
Advances in Immunology (ADV. IMMUNOL.) (United States) 1996, 62/- (131-166)
CODEN: ADIMA ISSN: 0065-2776
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH

13/3/46 (Item 40 from file: 73)
DIALOG(R)File 73:EMBASE

06551821 EMBASE No: 1996212396
B7-mediated costimulation and the immune response
Schultze J.; Nadler L.M.; Gribben J.G.
Division of Hematologic Malignancies, Dana Farber Cancer Institute, Department of Medicine,Boston, MA 02115 United States
Blood Reviews (BLOOD REV.) (United Kingdom) 1996, 10/2 (111-127)
CODEN: BLORE ISSN: 0268-960X

DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

13/3/47 (Item 41 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

06470837 EMBASE No: 1996133516
CD28/**B7** system of T cell costimulation
Lenschow D.J.; Walunas T.L.; Bluestone J.A.
Department of Pathology, Ben May Institute, University of Chicago,Chicago, IL 60637 United States
Annual Review of Immunology (ANNU. REV. IMMUNOL.) (United States) 1996, 14/- (233-258)
CODEN: ARIMD ISSN: 0732-0582
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

13/3/48 (Item 42 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

06406467 EMBASE No: 1996064028
Presentation of self peptides by dendritic cells: Possible implications for the pathogenesis of rheumatoid arthritis
Thomas R.; Lipsky P.E.
Department of Medicine, University of Queensland, Princess Alexandra Hospital,Brisbane, QLD 4102 Australia
Arthritis and Rheumatism (ARTHRITIS RHEUM.) (United States) 1996, 39/2 (183-190)
CODEN: ARHEA ISSN: 0004-3591
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH

13/3/49 (Item 43 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

06361238 EMBASE No: 1996025020
B7-mediated costimulation can either provoke or prevent clinical manifestations of experimental allergic encephalomyelitis
Perrin P.J.; Scott D.; June C.H.; Racke M.K.
Immune Cell Biology Program, Naval Medical Research Institute, Mail Stop 06,Bethesda, MD 20889-5607 United States
Immunologic Research (IMMUNOL. RES.) (Switzerland) 1995, 14/3 (189-199)
CODEN: IMRSE ISSN: 0257-277X
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

13/3/50 (Item 44 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

06298245 EMBASE No: 1995336718
CTLA4Ig: A novel immunoglobulin chimera with immunosuppressive properties
Peach R.J.; Linsley P.S.
Bristol-Myers Squibb Pharm Res Inst, 3005 First Avenue,Seattle, WA 98121 United States
Methods: A Companion to Methods in Enzymology (METHODS COMPANION METHODS ENZYMOL.) (United States) 1995, 8/2 (116-123)

CODEN: MTHDE ISSN: 1046-2023
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

13/3/51 (Item 45 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

06174594 EMBASE No: 1995193440
New perspectives of CD28-**B7** mediated T cell costimulation
Bluestone J.A.
Ben May Institute, Department of Pathology, University of Chicago,Chicago, IL 60637 United States
Immunity (IMMUNITY) (United States) 1995, 2/6 (555-559)
CODEN: IUNIE ISSN: 1074-7613
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH

13/3/52 (Item 46 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

06167198 EMBASE No: 1995193236
Antigen presentation in the pathogenesis of **autoimmune** endocrine disease
Weetman A.P.
Dept. Medicine, University Sheffield, Clinical Sciences Centre, Northern General Hospital,Sheffield S5 7AU United Kingdom
Journal of Autoimmunity (J. AUTOIMMUN.) (United Kingdom) 1995, 8/3 (305-312)
CODEN: JOAUE ISSN: 0896-8411
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

13/3/53 (Item 47 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

06132471 EMBASE No: 1995164038
Evolution of the T-cell repertoire during the course of experimental immune-mediated demyelinating diseases
Miller S.D.; McRae B.L.; Vanderlugt C.L.; Nikcevich K.M.; Pope J.G.; Pope L.; Karpus W.J.
Department Microbiology-Immunology, Northwestern Univ. Medical School, 303 E Chicago Avenue,Chicago, IL 60611 United States
Immunological Reviews (IMMUNOL. REV.) (Denmark) 1995, -/144 (225-244)
CODEN: IMRED ISSN: 0105-2896
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

13/3/54 (Item 48 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

06032252 EMBASE No: 1995062490
Genetics of multiple sclerosis
Sadovnick A.D.; Ebers G.C.
Department of Medical Genetics, University of British Columbia, 222-6174 University Boulevard,Vancouver, BC V6T 1Z3 Canada
Neurologic Clinics (NEUROL. CLIN.) (United States) 1995, 13/1 (99-118)
CODEN: NECLE ISSN: 0733-8619

DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

13/3/55 (Item 49 from file: 73)
DIALOG(R)File 73:EMBASE
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06027147 EMBASE No: 1995057316
Immunologic tolerance: Development and disruption
Weigle W.O.
Department of Immunology, Scripps Research Institute,San Diego, CA United States
Hospital Practice (HOSP. PRACT.) (United States) 1995, 30/2 (81-84+89-90+92)
CODEN: HOPRB ISSN: 8750-2836
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

13/3/56 (Item 50 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

05937725 EMBASE No: 1994351468
Human tumor vaccines and genetic engineering of tumors with cytokine and histocompatibility genes to enhance immunogenicity
Rosenthal F.M.; Zier K.S.; Gansbacher B.
Division of Hematologic Oncology, Memorial Sloan-Kettering Cancer Ctr., Box 402, 1275 York Avenue,New York, NY 10021 United States
Current Opinion in Oncology (CURR. OPIN. ONCOL.) (United States) 1994, 6/6 (611-615)
CODEN: CUOOE ISSN: 1040-8746
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

13/3/57 (Item 51 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

05902982 EMBASE No: 1994322010
Blockade of the CD28 co-stimulatory pathway: A means to induce tolerance
Boussiotis V.A.; Gribben J.G.; Freeman G.J.; Nadler L.M.
Division of Hematologic Malignancies, Dana-Farber Cancer Institute, 44 Binney Street,Boston, MA 02115 United States
Current Opinion in Immunology (CURR. OPIN. IMMUNOL.) (United Kingdom) 1994, 6/5 (797-807)
CODEN: COPIE ISSN: 0952-7915
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

13/3/58 (Item 52 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

05641415 EMBASE No: 1994047566
Signals and signs for lymphocyte responses
Janeway Jr. C.A.; Bottomly K.
Section of Immunobiology, Howard Hughes Medical Institute, Yale University School of Medicine,New Haven, CT 06510 United States
Cell (CELL) (United States) 1994, 76/2 (275-285)
CODEN: CELLB ISSN: 0092-8674
DOCUMENT TYPE: Journal; Review

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

13/3/59 (Item 53 from file: 73)
DIALOG(R)File 73:EMBASE

04006707 EMBASE No: 1989175703
Myasthenia gravis
Newsom-Davis J.
Department of Clinical Neurology, Radcliffe Infirmary, University of Oxford, Oxford OX2 6HE United Kingdom
Annali Italiani di Medicina Interna (ANN. ITAL. MED. INTERNA) (Italy) 1988, 3/SUPPL. 1 (32-37)
CODEN: AIMIE ISSN: 0393-9394
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

13/3/60 (Item 54 from file: 73)
DIALOG(R)File 73:EMBASE

00856123 EMBASE No: 1977201740
HLA antigen segregation analysis in multiple sclerosis (MS) families
Bertrams J.; Kuwert E.
Abt. Lab. Med., Elisabeth Krankenh., Essen Germany
Zeitschrift fur Immunitatsforschung (Z. IMMUNITATSFORSCH.) 1976, 152/3 (200-208)
CODEN: ZIEKB
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

13/3/61 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10939006 21040290 PMID: 11196709
CTLA-4 in **autoimmune** diseases--a general susceptibility gene to **autoimmunity**?
Kristiansen OP; Larsen ZM; Pociot F
Steno Diabetes Center, Niels Steensensvej 2, DK-2820 Gentofte, Denmark.
Genes and immunity (England) Feb 2000, 1 (3) p170-84, ISSN 1466-4879 Journal Code: DXO
Languages: ENGLISH
Document type: Journal Article; Review; Review, Academic
Record type: Completed

13/3/62 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10876469 20493721 PMID: 11038703
Advances in the experimental study on the role of helper T cell subsets in the pathogenesis and the treatment of **autoimmune** diseases]
Wang QB; Zhao WS
Department of Immunology, China-Japan Friendship Institute of Clinical Medical Sciences, Beijing.
Sheng li ke xue jin zhan (CHINA) Apr 1997, 28 (2) p119-24, ISSN 0559-7765 Journal Code: UE8
Languages: CHINESE
Document type: Journal Article; Review; Review, Tutorial
Record type: Completed

13/3/63 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08760419 96381413 PMID: 8789426
Costimulation in tolerance and **autoimmunity**.
Guerder S; Flavell RA
Section of Immunobiology, Yale University School of Medicine, New Haven, CT 06520, USA.
International reviews of immunology (SWITZERLAND) 1995, 13 (2) p135-46, ISSN 0883-0185 Journal Code: IRI
Contract/Grant No.: DK43078, DK, NIDDK; DK45735, DK, NIDDK
Languages: ENGLISH
Document type: Journal Article; Review; Review, Tutorial
Record type: Completed

13/3/64 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

03226363 81037876 PMID: 552228
The natural killer activity (cytotoxicity) of lymphocytes.
Petranyi GG; Benczur M; Varga M; Gyorffy G; Gyodi E; Onody K; Hollan RS
Annales immunologiae Hungaricae (HUNGARY) 1979, 19 p93-104, ISSN 0570-1708 Journal Code: 58R
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

13/3/65 (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

134235715 CA: 134(17)235715m JOURNAL
CD28/CD152-B7 costimulation and diseases
AUTHOR(S): Azuma, Miyuki
LOCATION: Graduate School, Tokyo Medical and Dental University, Japan,
JOURNAL: Igaku no Ayumi DATE: 2000 VOLUME: 193 NUMBER: 10 PAGES: 787-792 CODEN: IGAYAY ISSN: 0039-2359 LANGUAGE: Japanese PUBLISHER: Ishiyaku Shuppan

13/3/66 (Item 2 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

131241571 CA: 131(18)241571r CONFERENCE PROCEEDING
Targeting costimulatory and other signaling molecules in murine lupus
AUTHOR(S): Halvorson, Mark J.; Gause, William C.
LOCATION: Department of Microbiology and Immunology, Uniformed Services University of Health Sciences, Bethesda, MD, USA
JOURNAL: Lupus EDITOR: Kammer, Gary M. (Ed), Tsokos, George C (Ed),
DATE: 1999 PAGES: 656-670 CODEN: 67VNAV LANGUAGE: English PUBLISHER: Humana,Totowa, N. J

13/3/67 (Item 3 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

131086510 CA: 131(7)86510z JOURNAL
Finally, CTLA4Ig graduates to the clinic
AUTHOR(S): Sayegh, Mohamed H.
LOCATION: Laboratory of Immunogenetics and Transplantation, Harvard Medical School, Brigham and Women's Hospital, Boston, MA, 02115, USA

JOURNAL: J. Clin. Invest. DATE: 1999 VOLUME: 103 NUMBER: 9 PAGES: 1223-1225 CODEN: JCINAO ISSN: 0021-9738 LANGUAGE: English PUBLISHER: American Society for Clinical Investigation

13/3/68 (Item 4 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

131003885 CA: 131(1)3885b JOURNAL
Immunomodulation of the CD28-B7 system: effects of inhibition of co-stimulatory signals provided by CD28-B7 interaction on rat autoimmune anti-glomerular basement membrane glomerulonephritis
AUTHOR(S): Nishikawa, K.; Matsuo, S.
LOCATION: Division of Nephrology, The Third Department of Internal Medicine, Nagoya University School of Medicine, Nagoya, Japan, 466-8550
JOURNAL: Nephrol., Dial., Transplant. DATE: 1999 VOLUME: 14 NUMBER: Suppl. 1 PAGES: 19-21 CODEN: NDTREA ISSN: 0931-0509 LANGUAGE: English
PUBLISHER: Oxford University Press

13/3/69 (Item 5 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

128009996 CA: 128(2)9996y JOURNAL
B7-immunotoxin for in vivo modulation of primary immune responses
AUTHOR(S): Otten, Henny G.; De Gast, Gijsbert C.
LOCATION: Dept. of Medical Immunology, Transplantation Laboratory, University Hospital Utrecht, 3584 CX, Utrecht, Neth.
JOURNAL: Drug News Perspect. DATE: 1997 VOLUME: 10 NUMBER: 7 PAGES: 401-405 CODEN: DNPEED ISSN: 0214-0934 LANGUAGE: English PUBLISHER: Prous

13/3/70 (Item 6 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

127344987 CA: 127(25)344987c CONFERENCE PROCEEDING
The yin/yang of CD28 T-cell costimulation in autoimmunity
AUTHOR(S): Bluestone, Jeffrey A.; Miller, Stephen
LOCATION: Dep. of Pathology and Committee on Immunology, Ben May Institute for Cancer Research, University of Chicago, Chicago, IL, 60637, USA
JOURNAL: Immune Tolerance, Int. Symp. EDITOR: Banchereau, Jacques (Ed),
DATE: 1996 PAGES: 105-113 CODEN: 65FCA6 LANGUAGE: English PUBLISHER: Elsevier,Paris, Fr

13/3/71 (Item 7 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

127219098 CA: 127(16)219098n JOURNAL
New strategy for immune regulation
AUTHOR(S): Okumura, Ko; Azuma, Miyuki
LOCATION: Menekigaku, Juntendo Daigaku, Tokyo, Japan, 113
JOURNAL: Nippon Naika Gakkai Zasshi DATE: 1997 VOLUME: 86 NUMBER: 9
PAGES: 1778-1783 CODEN: NNGAAS ISSN: 0021-5384 LANGUAGE: Japanese
PUBLISHER: Nippon Naika Gakkai

13/3/72 (Item 8 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

126210644 CA: 126(16)210644j JOURNAL
CD28/B7 regulation of autoimmune diabetes
AUTHOR(S): Herold, Kevan C.; Lenschow, Deborah J.; Bluestone, Jeffrey A.
LOCATION: Department of Medicine, The University of Illinois at Chicago, Chicago, IL, 60612, USA
JOURNAL: Immunol. Res. DATE: 1997 VOLUME: 16 NUMBER: 1 PAGES: 71-84
CODEN: IMRSEB ISSN: 0257-277X LANGUAGE: English PUBLISHER: Humana

13/3/73 (Item 9 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

123007401 CA: 123(1)7401y JOURNAL
The CD28/CTLA-4:B7 receptor system in experimental autoimmune encephalomyelitis
AUTHOR(S): Linsley, Peter S.
LOCATION: Bristol -Myers Squibb Pharmaceutical Res. Inst., Seattle, WA, USA
JOURNAL: J. Clin. Invest. DATE: 1995 VOLUME: 95 NUMBER: 6 PAGES: 2429-30 CODEN: JCINAO ISSN: 0021-9738 LANGUAGE: English

4

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                                    bbb                lll
                                     bb                 ll
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 pp         gg   aaa aa mm    mm bb bbb   eeee     llll
pppp    ggggg
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 3333      11    555555
33  33    111    55
    33     11    55555
  333      11        55
    33     11        55
33  33     11    55  55
 3333    111111   5555
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8/1/01

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 s s11 and psoriasis

           1107  S11
          49269  PSORIASIS
     S14    11  S11 AND PSORIASIS
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...completed examining records
     S15    10  RD S14 (unique items)
? t s15/7/all


 15/7/1     (Item 1 from file: 73)
DIALOG(R)File  73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

11186618     EMBASE No: 2001200214
  IDEC-114 IDEC
  Schopf R.E.
  R.E. Schopf, Johannes Gutenberg University, Department of Dermatology,
  55101 Mainz  Germany
  AUTHOR EMAIL: schopf@hautlink.klink.uni-mainz.de
  Current Opinion in Investigational Drugs ( CURR. OPIN. INVEST. DRUGS ) (
  United Kingdom)   2001, 2/5 (635-638)
  CODEN: CIDRE   ISSN: 0967-8298
  DOCUMENT TYPE: Journal ; Review
  LANGUAGE: ENGLISH   SUMMARY LANGUAGE: ENGLISH
  NUMBER OF REFERENCES: 28

  IDEC is developing a PRIMATIZED-anti-B7 antibody (IDEC-114) for the
treatment of autoimmune and inflammatory diseases, such as
psoriasis and rheumatoid arthritis. It is currently undergoing phase
II trials in patients with psoriasis. A randomized, blind,
placebo-controlled, multiple-dose phase II study was initiated in January
2001 to evaluate the potential clinical activity and safety of IDEC-114 in
patients with moderate-to-severe psoriasis. The antibody targets the
B7 antigen on the surface of antigen-presenting cells that normally
interact with T-cells to initiate an immune response. Antibodies directed
at B7 may be useful in preventing unwanted immune responses in
autoimmune diseases such as systemic lupus erythematosus, idiopathic
thrombocytopenic purpura as well as transplant rejection. PRIMATIZED
antibodies, genetically engineered from cynomolgus macaque monkey and human
components, are structurally indistinguishable from human antibodies. They
may, therefore, be less likely to cause adverse reactions in humans, making
them potentially suited for long-term, chronic treatment. IDEC has signed
an antibody humanization patent licensing agreement with Protein Design
Labs. IDEC is also collaborating with Mitsubishi-Tokyo (formerly Mitsubishi
Kasei) on the development of this antibody.


 15/7/2     (Item 2 from file: 73)
DIALOG(R)File  73:EMBASE
(c) 2001 Elsevier Science B.V. All rts. reserv.

10837811     EMBASE No: 2000318499
  CTLA4-Ig: A novel immunosuppressive agent
  Najafian N.; Sayegh M.H.
  N. Najafian, Brigham and Women's Hospital, Immunogenetics and
  Transplantation, Harvard Medical School, 75 Francis Street, Boston, MA
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02115 United States
AUTHOR EMAIL: nnajafian@rics.bwh.harvard.edu
Expert Opinion on Investigational Drugs (EXPERT OPIN. INVEST. DRUGS) (United Kingdom) 2000, 9/9 (2147-2157)
CODEN: EOIDE ISSN: 1354-3784
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 82

Activation of naive T-cells requires two signals: one is antigen-specific and based on T-cell receptor (TCR) recognition of a peptide-MHC complex and the second is antigen-nonspecific and delivered by specific T-cell receptors after ligation with their ligands (costimulatory molecules) expressed by antigen-presenting cells (APCs). Engagement of the **B7** family of molecules on APCs with their T-cell associated ligands, CD28 and CTLA-4 (CD152), provides a pivotal costimulatory signal in T-cell activation. The lack of costimulation after engagement of the T-cell receptor by antigen, results in a state of antigen-specific unresponsiveness, termed anergy. Manipulation of CD28/**B7** pathway has therefore been envisioned as a potential strategy for achieving therapeutically useful immunosuppression or tolerance. CTLA4-Ig has been initially developed by Bristol-Myers Squibb as a competitive inhibitor of CD28/**B7** pathway (BMS-188667). Thereafter, CTLA4-Ig was produced by Repligen and also in some individual laboratories. In various animal models, discussed in this paper, CTLA4-Ig has been shown to inhibit T-cell-dependent antibody responses, significantly prolong transplanted organ survival, induce long-term donor-specific tolerance in some models, slow progression of **autoimmune** disease and to have immunomodulatory function in several other immunological disease models. Recently, CTLA4-Ig has entered Phase I clinical trials for the treatment of **psoriasis**, a T-cell mediated skin disease and treatment of graft-versus-host disease in allogeneic bone marrow transplantation. Large clinical randomised trials on the use of CTLA4-Ig are missing, nevertheless, its immunosuppressive effects coupled with features such as specificity of interaction and low toxicity, make CTLA4-Ig a promising new therapeutic agent for induction of donor-specific immunological tolerance, the ultimate goal of clinical immunosuppression.

15/7/3 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE

07713118 EMBASE No: 1999204113
Excessive paternal transmission in psoriatic arthritis
Rahman P.; Gladman D.D.; Schentag C.T.; Petronis A.
Dr. D.D. Gladman, 1-318 Main Pavilion, Toronto Hospital, Western Division, 399 Bathurst Street, Toronto, Ont. M5T 2S8 Canada
Arthritis and Rheumatism (ARTHRITIS RHEUM.) (United States) 1999, 42/6 (1228-1231)
CODEN: ARHEA ISSN: 0004-3591
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 15

Objective. The differential expression of a disease according to the sex of the disease-transmitting parent has been demonstrated in several **autoimmune** disorders. The purpose of the present study was to determine whether there are differences in the transmission and expression of psoriatic arthritis (PsA) that are dependent on the sex of the affected parent. Methods. All probands (patients with PsA) were identified from among the patients attending the University of Toronto Psoriatic Arthritis Clinic. A selfreported family history of **psoriasis** or PsA was noted for each proband. Differences in parental and offspring transmission with respect to the proband were evaluated. In addition, the expression of PsA

according to the sex of the affected parent was assessed at the time of the proband's presentation to the clinic. Results. Ninety-five probands had affected parents: 62 (65%) had an affected father, and 33 (35%) had an affected mother. Thus, the proportion of paternal transmission (0.65) was significantly greater than was expected (0.5) (P = 0.001). Twelve of 74 offspring from male probands (16.2%) were affected with **psoriasis** or PsA, as compared with 9 of 108 offspring from female probands (8.3%) (P = 0.10). Probands whose fathers were affected had a higher frequency of skin lesions prior to arthritis (P = 0.047), an erythrocyte sedimentation rate >15 mm/hour (P = 0.044), and a lower incidence of rheumatoid factor (P = 0.044). No differences were noted with respect to age at the onset of **psoriasis** or PsA, the severity of the PsA, or the frequency of HLA antigens. Conclusion. There appears to be excessive paternal transmission in PsA. Further clinical confirmation and elucidation of its genetic basis is warranted.

15/7/4 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE

05809949 EMBASE No: 1994219154
Characterization of dermal dendritic cells in **psoriasis**. Autostimulation of T lymphocytes and induction of Th1 type cytokines
Nestle F.O.; Turka L.A.; Nickoloff B.J.
Department of Pathology, M4232 Medical Science I, University of Michigan, 1301 Catherine Street,Ann Arbor, MI 48109-0602 United States
Journal of Clinical Investigation (J. CLIN. INVEST.) (United States) 1994, 94/1 (202-209)
CODEN: JCINA ISSN: 0021-9738
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Local activation of T lymphocytes is regarded as an important immunological component of psoriatic skin lesions. Within psoriatic plaques (PP) there are large numbers of dermal dendritic cells (DDCs) immediately beneath the hyperplastic epidermis surrounded by T cells. In this study we investigated the ability of DDCs isolated from PP skin to support immune responses of resting peripheral blood T cells. For comparison, other dendritic cells were obtained from blood of the same psoriatic patients, as well as DDCs from skin of normal healthy individuals (designated NN skin). All dendritic cells studied had high surface expression of HLA-DR, **B7** , and lymphocyte function associated antigen-1 molecules. T cell proliferative responses and cytokine production profiles to these various dendritic cells were measured in the absence and presence of PHA or bacterial-derived superantigens. In the absence of exogenous mitogens, PP skin-derived DDCs were much more effective stimulators of spontaneous T cell proliferation compared with either psoriatic blood-derived or NN skin-derived dendritic cells. Antibody blocking studies revealed involvement of HLA-DR, **B7**, and lymphocyte function associated antigen-1 on PP skin-derived DDCs. Cytokine profiles revealed that in the absence of exogenous stimuli PP skin-derived DDCs mediated a T cell response with high levels of IL-2 and IFN-gamma, but not IL-4 or IL-10. NN skin-derived DDCs produced a similar qualitative response, but quantitative amounts of all cytokines measured were lower. Upon addition of PHA or superantigens, both PP skin-derived and NN skin-derived DDCs mediated high levels of IL-2 and IFN-gamma production, with induction of IL-4 particularly evident for PHA reactions. Addition of conditioned medium from psoriatic dermal fragments did not enhance the autostimulatory capacity of blood-derived dendritic cells. These findings highlight the potent autostimulatory potential of PP skin-derived DDCs and suggest an important immunological contribution for these previously overlooked cell types contained within lesional skin sites.

15/7/5 (Item 5 from file: 73)
DIALOG(R)File 73:EMBASE

00975302 EMBASE No: 1978103626
HLA and disease
Svejgaard A.
Tissue Typ. Lab., State Univ. Hosp., Copenhagen
Revue Francaise de Transfusion et Immuno-Hematologie (REV. FR. TRANSFUS. IMMUNO-HEMATOL.) (France) 1977, 20/1 (27-30)
CODEN: RFTID
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

The major histocompatibility system (MHC) of man (the HLA system) has proved to be of general medical interest far beyond the fields of transplantation and immunogenetics because a number of HLA factors appear to be associated with the ability of the individual to develop a variety of diseases. The HLA system may be called an Antigen-Receptor-Mediator-System (ARMS) because it controls both blood group antigens (some of which are present on most, while others (Ia) are only present on some types of cells), immune response/determinants, i.e. receptors for immunogenes (including perhaps some viruses) and some complement components, i.e. some immune mediators. The homologous system (H-2) in mice is known to control other characters as well, e.g. testis and thymus weight, the ability to develop thyroiditis and virus induced leukemia, and, in addition, it regulates the concentration of cyclic AMP in liver cells. A 2-page table of characteristic examples of diseases associated with HLA is given and presents all data, as found up to the time of writing. Some socalled organ-specific **autoimmune** disorders are associated with HLA-B8 (or perhaps rather HalphaA-Dw3): idiopathic Addison's disease, Graves' disease, juvenile diabetes mellitus, and Sjogren's disease, while others (e.g. pernicious anemia and Hashimoto's thyroiditis) are not. The same antigens are strongly associated with celiac disease, dermatitis herpetiformis, and chronic auto-immune hepatitis. The HLA-Dw2 antigen is quite strongly associated with multiple sclerosis, and its presence seems to indicate a poor prognosis. **Psoriasis** vulgaris occurs more frequently in individuals possessing the HA-B13, B17 and/or Bw37 antigens. The most recent findings indicate that HLA-**B7** and Bw16 are associated with manic-depressive disorder, indicating that HLA may also operate through non-immunologic mechanisms. The various associations have a number of clinical and genetic implications. Many theories have been put forward to explain these associations. The 3 major theories involve: the action of immune response genes; the receptor theory; and molecular mimicry.

15/7/6 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10513970 20115226 PMID: 10648117
CD69, HLA-DR and the IL-2R identify persistently activated T cells in **psoriasis** vulgaris lesional skin: blood and skin comparisons by flow cytometry.
Ferenczi K; Burack L; Pope M; Krueger JG; Austin LM
Laboratory for Investigative Dermatology, The Rockefeller University, New York, NY 10021, USA.
Journal of autoimmunity (ENGLAND) Feb 2000, 14 (1) p63-78, ISSN 0896-8411 Journal Code: ADL
Contract/Grant No.: AI39214, AI, NIAID; CA54215, CA, NCI; M01-RR00102, RR, NCRR
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Many lymphocyte-activation-associated molecules are observed by immunohistochemistry in **psoriasis** vulgaris lesional skin. Non-T cells

in lesional skin also express these molecules. We quantitatively measured the number of T cells expressing cell surface activation-associated molecules (CD69, CD25, CD122, HLA-DR) and co-stimulatory molecules (CD28, CTLA-4, CD80, CD86), including a Type 2 T cell marker (CD30) and CD11b, by flow cytometry of skin and peripheral blood. T cells in single cell suspensions of psoriatic lesional-epidermis-expressed HLA-DR (86%), CD69 (59%), CD25 (55%), CD122 (44%), and CD28 (91%). Dermal T cells showed similar percentages except for CD69 (17%). CD69 was found directly in lesional skin biopsies by immunohistochemistry. Both CD4 and CD8 subsets from lesional skin contained large populations of CD25+ cells with a bias towards CD8 activation in the epidermis and towards CD4 activation in the dermis. CD86, CD80, CTLA-4, CD30 and CD11b were expressed by less than 23% of the T cell populations from both the epidermis and dermis. CD30+CD4+ cells were found two-fold over CD8+ T cells. These results show that the majority of lesional lymphocytes are persistently activated. We also found the majority of Type 2 associated markers primarily on the CD4+ epidermal T cell population. Psoriatic blood contained elevated levels of T cells expressing CD25, primarily within the CD8+ subset. Thus the majority of lesional T cells expressed the three primary activation markers, while psoriatic blood T cells were distinguished by an increase in CD25, specifically within the CTL population.
Record Date Created: 20000320

15/7/7 (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

134051384 CA: 134(5)51384w PATENT
Antisense modulation of B7 protein expression
INVENTOR(AUTHOR): Bennett, C. Frank; Vickers, Timothy A.; Karras, James G.
LOCATION: USA
ASSIGNEE: Isis Pharmaceuticals, Inc.
PATENT: PCT International ; WO 200074687 A1 DATE: 20001214
APPLICATION: WO 2000US14471 (20000525) *US 326186 (19990604)
PAGES: 162 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: A61K-031/70A; C07H-021/00B; C12N-005/06B DESIGNATED COUNTRIES: AE; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CR; CU; CZ; DE; DK; DM; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD; SL ; SZ; TZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG
SECTION:
CA201007 Pharmacology
CA209XXX Biochemical Methods
CA233XXX Carbohydrates
CA263XXX Pharmaceuticals
IDENTIFIERS: B7 protein expression antisense oligonucleotide, immune disease treatment B7 antisense oligonucleotide, diagnosis immune disease B7 antisense oligonucleotide, T cell activation modulation B7 antisense oligonucleotide
DESCRIPTORS:
Transplant rejection...
allotransplant; antisense modulation of B7 protein expression
Antigen-presenting cell... Antirheumatic agents... Antisense oligonucleotides... Anti-inflammatory agents... Autoimmune disease... CD80(antigen)... CD86(antigen)... Drug delivery systems... Immunosuppressants... Macrophage... Monocyte... mRNA... Psoriasis... T cell(lymphocyte)...
antisense modulation of B7 protein expression
Encephalomyelitis...
autoimmune; antisense modulation of B7 protein expression

Gene...
expression; antisense modulation of B7 protein expression
Cell adhesion molecules...
ICAM-1 (intercellular adhesion mol. 1); antisense modulation of B7 protein expression
Cell proliferation...
inhibitors; antisense modulation of B7 protein expression
T cell(lymphocyte)...
proliferation; antisense modulation of B7 protein expression
Cell proliferation...
T cell; antisense modulation of B7 protein expression
Multiple sclerosis...
therapeutic agents; antisense modulation of B7 protein expression
Biological transport...
uptake, lipophilic moiety for enhancement of; antisense modulation of B7 protein expression
CAS REGISTRY NUMBERS:
155362-55-3P 163759-94-2P 185229-68-9P 212061-30-8P 312777-42-7P
312777-43-8P 312777-44-9P 312777-45-0P 312777-46-1P 312777-47-2P
312777-48-3P 312777-49-4P 312777-50-7P 312777-51-8P 312777-52-9P
312777-53-0P 312777-54-1P 312777-55-2P 312777-56-3P 312777-57-4P
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313279-91-3P 313279-93-5P antisense modulation of B7 protein expression
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93-97-0 108-24-7 109-86-4 524-38-9 1463-10-1 37306-44-8 40615-36-9
58479-61-1 102691-36-1 219752-23-5 reaction; antisense modulation of

B7 protein expression
107-21-1 reactions, reaction; antisense modulation of B7 protein expression
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313286-98-5 313286-99-6 313287-00-2 313287-01-3 313287-02-4
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313288-33-4 313288-34-5 313288-35-6 313288-36-7 313288-37-8
313288-38-9 313288-39-0 313288-40-3 313288-41-4 313288-42-5
313288-43-6 313288-44-7 313288-45-8 313288-46-9 313288-47-0
313288-48-1 313288-49-2 313288-50-5 313288-51-6 313288-52-7
313288-53-8 313288-54-9 313288-55-0 313288-56-1 313288-57-2
313288-58-3 313288-59-4 313288-60-7 313288-61-8 313288-62-9
313288-63-0 313288-64-1 313288-65-2 313288-66-3 313288-67-4
313288-68-5 313288-69-6 313288-70-9 313288-71-0 313288-72-1
313288-73-2 313288-74-3 313288-75-4 313288-76-5 313288-77-6
313288-78-7 313288-79-8 313288-80-1 313288-81-2 313288-82-3
313288-83-4 313288-84-5 313288-85-6 313288-86-7 313288-87-8
313288-88-9 313288-89-0 313288-90-3 313288-91-4 313288-92-5
313288-93-6 313288-94-7 313288-95-8 313288-96-9 313288-97-0
313288-98-1 313288-99-2 313289-00-8 313289-01-9 313289-02-0
unclaimed nucleotide sequence; antisense modulation of B7 protein expression

15/7/8 (Item 2 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

133176161 CA: 133(13)176161g PATENT
Novel polypeptides involved in immune response
INVENTOR(AUTHOR): Yoshinaga, Steven Kiyoshi
LOCATION: USA
ASSIGNEE: Amgen Inc.
PATENT: PCT International ; WO 200046240 A2 DATE: 20000810
APPLICATION: WO 2000US1871 (20000127) *US 244448 (19990203) *US 264527 (19990308)
PAGES: 174 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C07K-014/00A
DESIGNATED COUNTRIES: AE; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH;

CN; CR; CU; CZ; DE; DK; DM; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM
DESIGNATED REGIONAL: GH; GM; KE; LS; MW; SD; SL; SZ; TZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG
SECTION:
CA215002 Immunochemistry
IDENTIFIERS: CD28 related protein 1 CRP1, B7 related protein 1 B7RP1, T cell disease CRP1 agonist antagonist, B7RP1 cancer autoimmune disease asthma allergy, gene therapy CRP1 B7RP1 gene antibody
DESCRIPTORS:
T cell(lymphocyte)...
activation; agonists and antagonists of CD28-related protein 1 or B7-related protein 1 for treating T cell-mediated diseases
Immunostimulants...
adjuvants; agonists and antagonists of CD28-related protein 1 or B7-related protein 1 for treating T cell-mediated diseases
Allergy... Animal... Antibodies... Antioxidants... Antiserums... Asthma... Autoimmune disease... B cell(lymphocyte)... CD4-positive T cell... CD8-positive T cell... Diabetes mellitus... DNA sequences... Eukaryote(Eukaryotae)... Fusion proteins(chimeric proteins)... Gene therapy ... Immunosuppression... Molecular cloning... Multiple sclerosis... Prokaryote... Protein sequences... Psoriasis... Rheumatoid arthritis... Solubilizers... Stabilizing agents... Susceptibility(genetic)... T cell(lymphocyte)... Transplant and Transplantation...
agonists and antagonists of CD28-related protein 1 or B7-related protein 1 for treating T cell-mediated diseases
Anaphylaxis...
allo-; agonists and antagonists of CD28-related protein 1 or B7-related protein 1 for treating T cell-mediated diseases
Blood transfusion...
allosensitization due to; agonists and antagonists of CD28-related protein 1 or B7-related protein 1 for treating T cell-mediated diseases
Immunity...
autoimmunity; agonists and antagonists of CD28-related protein 1 or B7-related protein 1 for treating T cell-mediated diseases
Transplant and Transplantation...
bone marrow; agonists and antagonists of CD28-related protein 1 or B7-related protein 1 for treating T cell-mediated diseases
Proteins,specific or class...
B7-related protein 1 or B7RP1; agonists and antagonists of CD28-related protein 1 or B7-related protein 1 for treating T cell-mediated diseases
Drug delivery systems...
carriers; agonists and antagonists of CD28-related protein 1 or B7-related protein 1 for treating T cell-mediated diseases
Proteins,specific or class...
CD28-related protein 1 or CRP1; agonists and antagonists of CD28-related protein 1 or B7-related protein 1 for treating T cell-mediated diseases
Genetic element...
expression control sequence; agonists and antagonists of CD28-related protein 1 or B7-related protein 1 for treating T cell-mediated diseases
Gene,animal...
for CRP1 and B7RP1; agonists and antagonists of CD28-related protein 1 or B7-related protein 1 for treating T cell-mediated diseases
Immunoglobulins...
G, const. domain; agonists and antagonists of CD28-related protein 1 or B7-related protein 1 for treating T cell-mediated diseases
Transplant and Transplantation...
graft-vs.-host reaction; agonists and antagonists of CD28-related protein 1 or B7-related protein 1 for treating T cell-mediated diseases
Intestine,disease...
inflammatory; agonists and antagonists of CD28-related protein 1 or

B7-related protein 1 for treating T cell-mediated diseases
T cell(lymphocyte)...
memory; agonists and antagonists of CD28-related protein 1 or
B7-related protein 1 for treating T cell-mediated diseases
Antibodies...
monoclonal; agonists and antagonists of CD28-related protein 1 or
B7-related protein 1 for treating T cell-mediated diseases
T cell(lymphocyte)...
proliferation; agonists and antagonists of CD28-related protein 1 or
B7-related protein 1 for treating T cell-mediated diseases
Neoplasm...
surveillance and removal; agonists and antagonists of CD28-related
protein 1 or B7-related protein 1 for treating T cell-mediated diseases
Lupus erythematosus...
systemic; agonists and antagonists of CD28-related protein 1 or
B7-related protein 1 for treating T cell-mediated diseases
Cell activation... Cell proliferation...
T cell; agonists and antagonists of CD28-related protein 1 or
B7-related protein 1 for treating T cell-mediated diseases
Disease,animal...
T cell-mediated; agonists and antagonists of CD28-related protein 1 or
B7-related protein 1 for treating T cell-mediated diseases
Shock(circulatory collapse)...
toxic shock syndrome; agonists and antagonists of CD28-related protein
1 or B7-related protein 1 for treating T cell-mediated diseases
Mammal(Mammalia)... Mouse... Rat... Rodent...
transgenic; agonists and antagonists of CD28-related protein 1 or
B7-related protein 1 for treating T cell-mediated diseases
Bone marrow...
transplant; agonists and antagonists of CD28-related protein 1 or
B7-related protein 1 for treating T cell-mediated diseases
Polymers,biological studies...
water-sol.; agonists and antagonists of CD28-related protein 1 or
B7-related protein 1 for treating T cell-mediated diseases
CAS REGISTRY NUMBERS:
212701-83-2 261150-59-8 261150-60-1 272762-88-6 288165-39-9
288165-42-4 288165-43-5 288165-44-6 288165-45-7 288165-46-8
288165-47-9 288165-48-0 288165-49-1 288165-50-4 288165-51-5
288165-52-6 288165-53-7 288165-54-8 288165-55-9 amino acid
sequence; agonists and antagonists of CD28-related protein 1 or
B7-related protein 1 for treating T cell-mediated diseases
260014-70-8 260014-71-9 288165-38-8 288165-40-2 288165-41-3 nucleotide
sequence; agonists and antagonists of CD28-related protein 1 or
B7-related protein 1 for treating T cell-mediated diseases
288166-01-8 288166-02-9 288166-03-0 288166-04-1 288166-05-2
288166-06-3 288166-07-4 288166-08-5 288166-09-6 288166-10-9
288166-11-0 unclaimed nucleotide sequence; novel polypeptides involved
in immune response
142637-20-5 263742-98-9 288165-97-9 288165-98-0 288165-99-1
288166-00-7 unclaimed protein sequence; novel polypeptides involved in
immune response

15/7/9 (Item 3 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

129027008 CA: 129(3)27008c PATENT
Identification of unique binding interactions between certain antibodies
and the human b7.1 and b7.2 co-stimulatory antigens
INVENTOR(AUTHOR): Anderson, Darrell R.; Hanna, Nabil; Brams, Peter
LOCATION: USA
ASSIGNEE: Idec Pharmaceuticals Corporation
PATENT: PCT International ; WO 9819706 A1 DATE: 19980514
APPLICATION: WO 97US19906 (19971029) *US 746361 (19961108)

PAGES: 87 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: A61K-039/395A; C07K-016/18B; C07K-016/28B DESIGNATED COUNTRIES: AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CU; CZ; DE; DK; EE; ES; FI; GB; GE; GH; HU; ID; IL; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; UA; UG; UZ; VN; YU; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM
DESIGNATED REGIONAL: GH; KE; LS; MW; SD; SZ; UG; ZW; AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; ML; MR; NE; SN; TD; TG
SECTION:
CA215003 Immunochemistry
CA203XXX Biochemical Genetics
IDENTIFIERS: monoclonal antibody antigen B7 CD80 CD87, immunosuppressant antibody antigen B7 autoimmune disease
DESCRIPTORS:
Mouse... Primate...
chimeric antibody; humanized or primatized monoclonal antibodies or light and heavy chains for inhibiting antigen B7.1 or B7.2 and for use as immunosuppressant for treating autoimmune diseases
Allergies... Aplastic anemia... Autoimmune diseases... B cell lymphoma... B cell(lymphocyte)... cDNA sequences... CD28(antigen)... CD80(antigen)... CD86(antigen)... CTLA-4(antigen)... Graft vs. host reaction... Idiopathic thrombocytopenic purpura... Immunosuppressants... Infection... Inflammation ... Insulin dependent diabetes mellitus... Interleukin 2... Monoclonal antibodies... Multiple sclerosis... Protein sequences... Psoriasis... Rheumatoid arthritis... Systemic lupus erythematosus... T cell(lymphocyte) ...
humanized or primatized monoclonal antibodies or light and heavy chains for inhibiting antigen B7.1 or B7.2 and for use as immunosuppressant for treating autoimmune diseases
Biliary tract diseases...
inflammatory; humanized or primatized monoclonal antibodies or light and heavy chains for inhibiting antigen B7.1 or B7.2 and for use as immunosuppressant for treating autoimmune diseases
CAS REGISTRY NUMBERS:
186271-56-7 186271-58-9 186271-60-3 186271-62-5 186271-64-7
208065-43-4 amino acid sequence; humanized or primatized monoclonal antibodies or light and heavy chains for inhibiting antigen B7.1 or B7.2 and for use as immunosuppressant for treating autoimmune diseases
186271-55-6 186271-57-8 186271-59-0 186271-61-4 186271-63-6
186271-65-8 nucleotide sequence; humanized or primatized monoclonal antibodies or light and heavy chains for inhibiting antigen B7.1 or B7.2 and for use as immunosuppressant for treating autoimmune diseases

15/7/10 (Item 4 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

126017804 CA: 126(2)17804h PATENT
Human antibodies derived from immunized xenomice
INVENTOR(AUTHOR): Kucherlapati, Raju; Jakobovits, Aya; Klapholz, Sue; Brenner, Daniel G.; Capon, Daniel J.
LOCATION: USA
ASSIGNEE: Cell Genesys, Inc.
PATENT: PCT International ; WO 9634096 A1 DATE: 19961031
APPLICATION: WO 95US5500 (19950428)
PAGES: 64 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/00A
DESIGNATED COUNTRIES: AU; CA; FI; HU; JP; KR; NO; NZ
DESIGNATED REGIONAL: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE
SECTION:
CA215003 Immunochemistry
IDENTIFIERS: human antibody Ig xenomice therapeutic
DESCRIPTORS:

Proteins(specific proteins and subclasses)...
amadori; human antibodies derived from immunized xenomice
Dermatophagoides... Leukocyte...
antigen; human antibodies derived from immunized xenomice
Antigens...
A7; human antibodies derived from immunized xenomice
Interferon receptors...
.beta.; human antibodies derived from immunized xenomice
Antigens...
B7.3; human antibodies derived from immunized xenomice
CD antigens...
CDw52; human antibodies derived from immunized xenomice
CD antigens...
CD27; human antibodies derived from immunized xenomice
Antigens...
CD29 ligand; human antibodies derived from immunized xenomice
Antigens...
CD30 ligand; human antibodies derived from immunized xenomice
CD antigens...
CD6; human antibodies derived from immunized xenomice
CD antigens...
CD72; human antibodies derived from immunized xenomice
Fc receptors...
E; human antibodies derived from immunized xenomice
Sialoglycoproteins...
endosialins; human antibodies derived from immunized xenomice
Glycoproteins(specific proteins and subclasses)...
gcIII; human antibodies derived from immunized xenomice
Lipids,biological studies...
glycated; human antibodies derived from immunized xenomice
Glycoproteins(specific proteins and subclasses)...
gp39; human antibodies derived from immunized xenomice
Cytokines...
Gro.alpha.; human antibodies derived from immunized xenomice
Cytokines...
Gro.beta.; human antibodies derived from immunized xenomice
Myelin...
growth inhibitor assocd. with; human antibodies derived from immunized xenomice
Thyroid diseases...
Hashimoto's thyroiditis; human antibodies derived from immunized xenomice
Surface antigens...
hepatitis virus; human antibodies derived from immunized xenomice
Adult respiratory distress syndrome... Allergens... Animal cell line... Animal cells... Antibodies... Antigens... Asthma... Autoimmune diseases... B cell(lymphocyte)... Behcet's syndrome... Cachexia... Carcinoembryonic antigen... CD11a(antigen)... CD11b(antigen)... CD11c(antigen)... CD14(antigen)... CD19(antigen)... CD20(antigen)... CD22(antigen)... CD28(antigen)... CD2(antigen)... CD30(antigen)... CD3(antigen)... CD40 ligand... CD40(antigen)... CD44(antigen)... CD45(antigen)... CD4(antigen) ... CD56(antigen)... CD5(antigen)... CD69(antigen)... CD7(antigen)... CD80(antigen)... CD86(antigen)... CD8(antigen)... Cell adhesion molecules ... Chemokines... Cholesteryl ester transfer protein... Class I MHC antigens... Class II MHC antigens... Coagulation factors(blood)... CTLA-4(antigen)... Cytomegalovirus... Dermatomyositis... Diagnosis... E glycoprotein(envelope glycoprotein)... Endotoxins... Enzymes,biological studies... Eosinophil cationic protein... Epidermal growth factor receptors ... Erythropoietin receptors... E-selectin... Fas antigen... Fc receptors ... Fc.epsilon.RI receptors... Fc.epsilon.RII receptors... Fibrinogens... Fibrins... Fibroblast growth factor receptors... Glomerulonephritis... Glycoprotein B... Glycoprotein H... Graft-vs.-host reaction... Granulocyte colony-stimulating factor receptors... Graves' disease... Growth factor receptors... Growth factors(animal)... Hematopoietin receptors... Hepatitis virus... Histocompatibility antigens... Human herpesvirus 3... Human

herpesvirus 4... Human herpesvirus... Human immunodeficiency virus 1... Human papillomavirus... ICAM-1(cell adhesion molecule)... ICAM-2(cell adhesion molecule)... IgE... Immunoglobulins... Insulin-dependent diabetes mellitus... Integrin .alpha.1.beta.1... Integrin .alpha.2.beta.1... Integrin .alpha.3.beta.1... Integrin .alpha.4.beta.1... Integrin .alpha.5.beta.1... Integrin .alpha.6.beta.1... Integrin .beta.1... Integrin .beta.2... Interferon receptors... Interferon .alpha. receptors... Interferon .gamma. receptors... Interferon .gamma.... Interleukin receptors ... Interleukin 1 receptors... Interleukin 10... Interleukin 11... Interleukin 12... Interleukin 13... Interleukin 15... Interleukin 1... Interleukin 2 receptors... Interleukin 2... Interleukin 3 receptors... Interleukin 3... Interleukin 4 receptors... Interleukin 4... Interleukin 5 receptors... Interleukin 5... Interleukin 6 receptors... Interleukin 6... Interleukin 7 receptors... Interleukin 7... Interleukin 8 receptors... Interleukin 8... Interleukin 9... Interleukins... Ley antigen... LFA-1(antigen)... LFA-3(antigen)... L-selectin... Macrophage inflammatory protein 1.alpha.... Mac-1 antigen... Major basic protein... Metastasis(tumor)... Monoclonal antibodies... Monocyte chemoattractant protein-1... Mucins... Multiple myeloma... Multiple sclerosis... Myasthenia gravis... Neutrophil-activating peptide-2... Osteopontin... Osteoporosis... Oxidized low-density lipoproteins... Paget's disease of bone... Platelet-derived growth factor receptors... Platelet-derived growth factors ... Polymyositis... Pseudomonas... Psoriasis... p150,95 antigen... P-glycoproteins... P-selectin... RANTES(chemokine)... Renal cell carcinoma ... Reperfusion injury... Respiratory syncytial virus... Rh blood groups... Rheumatoid arthritis... Scleroderma... Septic shock... Sjogren's syndrome ... Systemic lupus erythematosus... TCR(T-cell receptors)... Tetanus toxin ... Therapy... Thyrotropin receptors... Toxins... Transforming growth factor .beta. receptors... Transforming growth factors .beta.... Tumor necrosis factor receptors... Tumor necrosis factor .alpha.... Tumor-associated antigen... Type IV collagen... VCAM-1(cell adhesion molecule)...

human antibodies derived from immunized xenomice

Parathyroid hormone receptors...

humoral hypercalcemic factor; human antibodies derived from immunized xenomice

Genes(animal)...

Ig.; human antibodies derived from immunized xenomice

Interleukin receptors...

interleukin 10 receptors; human antibodies derived from immunized xenomice

Interleukin receptors...

interleukin 11 receptors; human antibodies derived from immunized xenomice

Interleukin receptors...

interleukin 13 receptors; human antibodies derived from immunized xenomice

Interleukins... Receptors...

interleukin 14; human antibodies derived from immunized xenomice

Interleukin receptors...

interleukin 15 receptors; human antibodies derived from immunized xenomice

Interleukin receptors...

interleukin 9 receptors; human antibodies derived from immunized xenomice

Lewis blood groups...

Leb, synthetic; human antibodies derived from immunized xenomice

Selectins...

ligands; human antibodies derived from immunized xenomice

Proteins(specific proteins and subclasses)...

LMP-1; human antibodies derived from immunized xenomice

Membrane proteins...

LMP-2 (latent-infection membrane protein 2); human antibodies derived from immunized xenomice

Allergens...

Lol p I (Lolium perenne, I); human antibodies derived from immunized xenomice
Connective tissue diseases...
mixed; human antibodies derived from immunized xenomice
Skin diseases...
Paget disease; human antibodies derived from immunized xenomice
Breast diseases... Reproductive tract diseases...
Paget; human antibodies derived from immunized xenomice
Antibodies...
pANCA or perinuclear antineutrophil cytoplasm antibodies; human antibodies derived from immunized xenomice
Skin diseases...
pemphigus; human antibodies derived from immunized xenomice
Chemokines...
PF4; human antibodies derived from immunized xenomice
c-erbB2 gene(animal)...
products; human antibodies derived from immunized xenomice
Virus...
protein; human antibodies derived from immunized xenomice
IgE... Interleukin 11... Interleukin 12... Interleukin 13... Interleukin 15 ... Interleukin 9...
receptors; human antibodies derived from immunized xenomice
DNA...
recombinant; human antibodies derived from immunized xenomice
Arthritis... Conjunctivitis... Urinary tract diseases...
Reiter's syndrome; human antibodies derived from immunized xenomice
Transplant(organ)...
rejection; human antibodies derived from immunized xenomice
Ischemia...
reperfusion; human antibodies derived from immunized xenomice
Ligands...
selectin; human antibodies derived from immunized xenomice
Venoms...
snake; human antibodies derived from immunized xenomice
Proteins(specific proteins and subclasses)...
uropontins; human antibodies derived from immunized xenomice
Receptors...
vascular endothelial growth factor; human antibodies derived from immunized xenomice
Bee... Snake...
venom; human antibodies derived from immunized xenomice
Proteins (general),biological studies...
viral; human antibodies derived from immunized xenomice
Mouse...
xeno-; human antibodies derived from immunized xenomice
Interleukin receptors...
12; human antibodies derived from immunized xenomice

CAS REGISTRY NUMBERS:

9002-71-5 9024-58-2 9054-63-1 19600-01-2 53237-59-5 62010-37-1 62031-54-3 62229-50-9 80043-53-4 80295-43-8 80295-54-1 81669-70-7 82986-89-8 92448-22-1 98603-84-0 116243-73-3 127464-60-2 human antibodies derived from immunized xenomice

9002-64-6 proteins related to; human antibodies derived from immunized xenomice

4

```
                                    bbb                lll
                                     bb                 ll
pp ppp    ggg gg  aaaa    mm  mm    bb       eeee      ll
 pp  pp gg  gg       aa  mmmmmmmm  bbbbb  ee  ee     ll
 pp  pp gg  gg    aaaaa  mmmmmmmm  bb  bb eeeeee     ll
 ppppp   ggggg  aa  aa   mm m mm  bb  bb ee         ll
 pp         gg   aaa aa mm    mm bb bbb   eeee     llll
pppp    ggggg
```

```
 3333      11      8888
33  33    111     88  88
    33     11     88  88
  333      11      8888
    33     11     88  88
33  33     11     88  88
 3333    111111    8888
```

8/1/01

9/7/23 (Item 13 from file: 73)
DIALOG(R)File 73:EMBASE

07386187 EMBASE No: 1998279106
Kinetics of expression of costimulatory molecules and their ligands in murine relapsing experimental **autoimmune** encephalomyelitis in vivo
Issazadeh S.; Navikas V.; Schaub M.; Sayegh M.; Khoury S.
Dr. S. Khoury, Center for Neurologic Diseases, 77 Avenue Louis Pasteur, Boston, MA 02115 United States
AUTHOR EMAIL: khoury@cnd.bwh.harvard.edu
Journal of Immunology (J. IMMUNOL.) (United States) 01 AUG 1998, 161/3 (1104-1112)
CODEN: JOIMA ISSN: 0022-1767
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 61

We studied the kinetics of expression of costimulatory molecules and cytokines in the central nervous system (CNS) in murine relapsing experimental **autoimmune** encephalomyelitis (EAE). During the natural course of EAE, **B7**-2 expression in the CNS **correlated** with **clinical** signs, while **B7**-1 was exclusively expressed during remissions. Interestingly, **B7**-1 was expressed on infiltrating mononuclear cells as well as neuronal cells in the CNS. In the periphery, **B7**-1 expression on APCs peaked with **clinical** disease but decreased on T cells. CD28 and CTLA4 molecules, the two known ligands for **B7**-1 and **B7**-2, bad distinct expression patterns in the CNS; CD28 was highly expressed and **correlated** with **B7**-2 expression on APCs (macrophages/microglia as well as astrocytes) and with the **clinical** signs of EAE. CTLA4, on the other hand, was expressed by substantially fewer cells during the effector phase of disease and peaked during remission, which is consistent with the emerging role of this molecule in the termination of immune responses. The expression of CD40 and CD40L in the CNS was increased during **clinical** attacks. The expression of IL-12, IFN-gamma, and TNF-alpha **correlated** with disease activity and severity, while TGF-beta was the only factor that was up-regulated during the recovery phase. Interestingly, TGF-beta was also expressed by neurons during remission. This is the first study demonstrating the kinetics of the in vivo expression of costimulatory molecules, their ligands, and cytokines in an **autoimmune** disease model characterized by remissions and relapses. Our data suggest that the targeting of costimulatory molecules to block an immune response must take into account the expression patterns in the target organ.

19/7/24 (Item 14 from file: 73)
DIALOG(R)File 73:EMBASE

07281156 EMBASE No: 1998194845
CTLA-4 promoter variants in patients with Graves' disease and Hashimoto's thyroiditis
Braun J.; Donner H.; Siegmund T.; Walfish P.G.; Usadel K.H.; Badenhoop K.
Dr. K. Badenhoop, Schwerpunkt Endokrinologie, Zentrum der Inneren Medizin, Klinikum J.W. Goethe Universitat, Theodor Stern-Kai 7, 60590 Frankfurt-Main Germany
AUTHOR EMAIL: badenhoop@em.uni-frankfurt.de
Tissue Antigens (TISSUE ANTIGENS) (Denmark) 1998, 51/5 (563-566)

CODEN: TSANA ISSN: 0001-2815
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 11

Graves' disease (GD) and Hashimoto's thyroiditis (HT) are T-cell mediated organ-specific **autoimmune** disorders with a genetic predisposition. The cytotoxic T-lymphocyte antigen 4 (CTLA-4) molecule is the predominant receptor for **B7** on activated T cells and represents a negative regulator for T-cell function. Since the CTLA-4-guanine at position 49 of exon 1 is associated with susceptibility to GD as well as to HT and IDDM, we investigated a recently detected cytosine/thymine substitution at position -318 within the CTLA-4 promoter region in patients with GD and HT. 125 patients with GD were significantly more often homozygous for cytosine (86% vs. 73% in controls, P = 0.006) and less frequently heterozygous for cytosine and thymine (14% vs. 27%, P = 0.008). In 64 patients with HT, the distribution was similar but not significant (81% homozygous for cytosine and 16% heterozygous). When **correlating** the promoter and the exon 1 polymorphism we found the strongest linkage between thymine (promoter) and adenine (exon 1). In conclusion, a promoter variant of the CTLA-4 gene represents an additional risk marker for GD and HT, but their predisposition is linked to the exon 1 alleles.

19/7/25 (Item 15 from file: 73)
DIALOG(R)File 73:EMBASE

06710173 EMBASE No: 1996375128
Perforin-positive leukemic cell infiltration in the aortic tissue of a patient with T-cell prolymphocytic leukemia
Seko Y.; Azuma M.; Yagita H.; Okumura K.; Yazaki Y.
Third Department Internal Medicine, Faculty of Medicine, University of Tokyo, 7-3-1 Hongo,Bunkyo-ku, Tokyo 113 Japan
International Angiology (INT. ANGIOL.) (Italy) 1996, 15/3 (245-248)
CODEN: INANE ISSN: 0392-9590
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Here we report a rare case of T-cell prolymphocytic leukemia in which leukemic killer cells, expressing a cytolytic factor perforin, infiltrated the aorta as well as the heart and may have directly injured aortic vascular cells which strongly expressed human leukocyte antigens (HLAs) and intercellular adhesion molecule-1 (ICAM-1) as well as costimulatory molecules **B7** and **B70**, which are ligands for CD28 expressed on T-cells. In spite of chemotherapy against leukemic cells, this **autoimmune** process finally caused fatal multi-organ **failure**.

4

```
                                    bbb                 lll
                                     bb                  ll
pp ppp    ggg gg  aaaa    mm  mm    bb       eeee       ll
 pp  pp gg  gg       aa  mmmmmmm  bbbbb  ee  ee      ll
 pp  pp gg  gg    aaaaa  mmmmmmm  bb  bb eeeeee      ll
 ppppp   ggggg  aa  aa   mm m mm  bb  bb ee          ll
 pp         gg   aaa aa mm   mm bb bbb   eeee      llll
pppp    ggggg
```

```
 3333     2222      11
33  33   22  22    111
    33       22     11
  333      222      11
    33    22        11
33  33   22  22     11
 3333    222222  111111
```

8/1/01

19/7/22 (Item 12 from file: 73)
DIALOG(R)File 73:EMBASE

07664246 EMBASE No: 1999136262
Costimulatory molecules **B7**-1 and **B7**-2 on CSF cells in multiple sclerosis and optic neuritis
Windhagen A.; Maniak S.; Gebert A.; Ferger I.; Heidenreich F.
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DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 44

The aberrant expression of **B7** costimulatory molecules is involved in the pathogenesis of **autoimmune** diseases and overexpression of **B7**-1 was found in inflammatory multiple sclerosis (MS) lesions. We here report that costimulatory molecules **B7**-1 and **B7**-2 are expressed on cerebrospinal fluid (CSF) monocytes and B-lymphocytes from patients with MS, optic neuritis (ON) and other inflammatory central nervous system (CNS) diseases. In patients with ON but not MS, increased expression of **B7**-2 was detected as compared to non-inflammatory controls. The expression of **B7**-1 in MS and ON patients **correlates** with disease duration but not with relapses in patients with MS indicating a role in early disease but not as a reliable marker of disease activity at later stages of MS.

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    33       33  66  66
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 3333     3333    6666
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8/1/01

10797417 EMBASE No: 2000277841

How to outfox mother nature - **Autoimmunity**: Moving from shadows to sunshine

Borchers A.T.; Keen C.L.; Shoenfeld Y.; Gershwin M.E.
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Israel Medical Association Journal (ISR. MED. ASSOC. J.) (Israel) 2000, 2/SUPPL. JULY (15-22)
CODEN: IMAJC ISSN: 1565-1088
DOCUMENT TYPE: Journal; Conference Paper
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 52

The morbidity and disability associated with **autoimmune** diseases represent a significant health problem. One in 31 people have one form or another of an **autoimmune** disease. Despite the avalanche of molecular data, immunogenetic definitions and improvements in serologic diagnosis, we are still far from discovering the etiologies of these diseases. For some **autoimmune** diseases, there may be a very long latency period between disease onset and **clinical** presentation. Existing therapies tend to be only partially **successful** and often accompanied by a variety of serious side effects. However, even in the absence of a complete understanding of the underlying genetic, environmental and coincidental factors that confer susceptibility to **autoimmune** diseases, we believe that it is possible to devise **successful** therapies by interfering with one or more of the pathways of destruction characteristic of a specific **autoimmune** disease. We have prepared a futuristic look at the treatment of **autoimmune** disease by extrapolation of current research directions as well as thoughts on new methods of delivery of recombinant monoclonal antibodies. We **predict** that we will 'cure' **autoimmune** pathology long before we understand the etiology. In the case of inflammatory bowel disease, as a model, and taking advantage of what is known on animal studies, we illustrate the progress that has been made in elucidating these pathways of destruction and speculate about

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  333    44  44     222
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33  33       44  22  22
 3333       4444 222222
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8/1/01

58622 BIOSIS NO.: 199900204731
Effects of **anti-B7** monoclonal antibodies on humoral immune responses.
AUTHOR: Daikh David I(a); Wofsy David
AUTHOR ADDRESS: (a)Arthritis/Immunology Section (111R), Department of Veterans Affairs Medical Center, 4150 Clement**USA
JOURNAL: Journal of Autoimmunity 12 (2):p101-108 March, 1999
ISSN: 0896-8411
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

ABSTRACT: The costimulatory interaction between CD28 on T cells and **B7**-related molecules on antigen presenting cells plays an important role in a broad range of functions of the immune system, including protective immunity, tolerance induction, allograft rejection, and the development of **autoimmune** diseases. Monoclonal antibodies to **B7**-1 and **B7**-2 have been used in vivo to examine the mechanisms underlying these processes and to evaluate costimulation antagonism as an approach to treatment of chronic **autoimmune** diseases. To determine whether **anti-B7** mAb might elicit, or inhibit, a host immune response that could influence the effects of these antibodies in vivo, we assessed the immune response to rat **anti-B7**-1 and **anti-B7**-2 mAb in healthy (BALB/c) mice and in lupus-prone NZB/NZW F1 (B/W) mice. In BALB/c mice, low doses (1-10 mug) of mAb to **B7**-1 and mAb to **B7**-2 elicited brisk immune responses that occurred earlier and were significantly greater than the immune response to an isotype-matched control rat mAb to ovalbumin. In contrast, at higher doses (100-500 mug), both **anti-B7** mAb, but not the control mAb, blocked the mouse anti-rat response. No such blockade occurred in B/W mice, who generated a significant mouse anti-rat response even at very high doses of **anti-B7** mAb (1,000-4,000 mug). Blockade of the immune response to the **anti-B7** mAb in BALB/c mice apparently did not reflect generalized immune suppression, because high doses of these mAb had little, if any effect on the humoral immune response to another antigen. These findings indicate that: (1) mAb to **B7**-1 and **B7**-2 can elicit either a potent immune response or no immune response at all depending upon the dose administered; (2) blockade of the immune response to **anti-B7** mAb may be more difficult in the setting of **autoimmunity**; and (3) neither **anti-B7**-1 nor **anti-B7**-2 causes generalized

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                                    bbb                lll
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 pp  pp gg  gg       aa  mmmmmmmm  bbbbb  ee  ee     ll
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pppp    ggggg
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8/1/01

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Set     Items   Description
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               ULIN? OR B7?)
S2         22   RD S1 (unique items)
S3          1   (7C10? OR 7B6?) (20N)(B7?)
S4        409   B7(20N)(EPITOPE?)
S5        282   B7?(20N)(EPITOPE?)(20N)(ANTIBOD?)
S6          0   S5 AND (7C10 OR 7B6)
S7          4   S5 AND REVIEW?
S8          2   S5 AND WORKSHOP?
S9          2   RD S7 (unique items)
S10         2   RD S8 (unique items)
S11      1107   (B7?) AND AUTOIMMUN?
S12        96   S11 AND REVIEW?
S13        73   RD S12 (unique items)
S14        11   S11 AND PSORIASIS
S15        10   RD S14 (unique items)
S16       299   S11 AND CLINICAL
S17       201   S16 AND HUMAN
S18        55   S16 AND (PREDICT? OR CORRELAT? OR FAIL? OR SUCCESS?)
S19        40   RD S18 (unique items)
? s s11 and (anti(w)B7?)

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       1129076  ANTI
         18275  B7?
           513  ANTI(W)B7?
     S20    72  S11 AND (ANTI(W)B7?)
? rd s20

...examined 50 records  (50)
...completed examining records
     S21    38  RD S20 (unique items)
? t s21/7/all


 21/7/1     (Item 1 from file: 5)
DIALOG(R)File   5:Biosis Previews(R)
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13051297   BIOSIS NO.: 200100258446
Role of B7-1 and B7-2 in the induction of experimental
  autoimmune encephalomyelitis (EAE).
AUTHOR: Jabs Claudia(a); Sobel Raymond A; Sharpe Arlene H(a); Kuchroo Vijay
  K(a)
AUTHOR ADDRESS: (a)Harvard Medical School, 77 Avenue Louis Pasteur, Boston,
  MA, 02445**USA
JOURNAL: FASEB Journal  15 (5):pA1064 March 8, 2001
MEDIUM: print
CONFERENCE/MEETING: Annual Meeting of the Federation of American Societies
for Experimental Biology on Experimental Biology 2001  Orlando, Florida,
USA  March 31-April 04, 2001
ISSN: 0892-6638
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English
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ABSTRACT: To study the role of **B7** costimulatory molecules in EAE, we have backcrossed **B7**-1-/- and **B7**-2-/- mice onto the EAE susceptible SJL background. In contrast to the results obtained with in vivo blocking with **anti-B7**-1 and **B7**-2 antibodies, **B7**-1-/- and **B7**-2-/- mice were susceptible to EAE induced with PLP 139-151. Interestingly, in comparison to the wild type (Wt) mice, the severity of EAE disease was significantly higher in **B7**-1-/- and **B7**-2-/- mice. Of the two **B7** deficient mouse strains, the disease in **B7**-1-/- mice was even more severe than in **B7**-2-/- mice. Lymph node cells (LNCs) from **B7**-1-/- and **B7**-2-/- mice proliferated and produced IL-2 comparable to Wt mice in response to PLP 139-151. LNCs from **B7**-1-/- mice, however, produced more IFNgamma than the Wt mice. To determine whether **B7** molecules play a role in thymic or peripheral selection of the autoreactive repertoire, we examined the endogenous repertoire to PLP 139-151 of the naive **B7** -1-/- and **B7**-2-/- mice. The naive SJL mice have an expanded endogenous repertoire to PLP 139-151 in that thymic and LNCs from Wt SJL mice proliferate spontaneously to PLP 139-151. Preliminary data suggest that **B7**-1-/- and **B7**-2-/- mice have a larger size of the endogenous PLP 139-151 reactive repertoire which may be responsible for more severe disease in **B7**-1-/- and **B7**-2-/- mice. These data suggest that the **B7**-1 and **B7**-2 molecules may have a role in thymic and peripheral deletion of self reactive T cells and loss of **B7**-1 and **B7**-2 molecules may result in the escape of self reactive cells from thymic or peripheral deletion.

21/7/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

12939243 BIOSIS NO.: 200100146392
Enhanced **B7**.2, but lack of **B7**.1 on MHC-II positive myelin-phagocytosing microglia in vivo predicts Th2-immune responses.
AUTHOR: Bechmann I(a); Peter S; Gimsa U; Beyer M; Nitsch R
AUTHOR ADDRESS: (a)Institute of Anatomy, Cell and Neurobiology, Humboldt-University Hospital Charite, Berlin**Germany
JOURNAL: Society for Neuroscience Abstracts 26 (1-2):pAbstract No-7999 2000
MEDIUM: print
CONFERENCE/MEETING: 30th Annual Meeting of the Society of Neuroscience New Orleans, LA, USA November 04-09, 2000
SPONSOR: Society for Neuroscience
ISSN: 0190-5295
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

ABSTRACT: Myelin-associated proteins can induce T cell-mediated (auto-)immune responses. However, following axonal degeneration, the brain is usually not targeted by such T cells in a destructive way. The reason for this apparent lack of immune activation is currently unclear. Two steps are required to activate the specific immune system, (I) phagocyosis and processing of debris by antigen presenting cells and (II) presentation of antigens to antigen-specific T cells via MHC-II and costimulatory **B7**.1 (CD80) or **B7**.2 (CD86)-molecules. Using entorhinal lesions as an paradigm of axonal degeneration, we have previously identified astrocytes and microglial cells to phagocytose myelin debris. Subsequently, only microglia expressed the adhesion molecules VCAM-4, ICAM-1 and LFA-1 which are involved in antigen presentation. Applying a phagocytosis-dependent labelling technique and immunocytochemistry, we show now that such phagocytic microglia exhibit long-lasting MHC-II expression in zones of axonal degeneration, but were immune-negative for a pannel of **anti-B7**.1 (CD80) antibodies. Interestingly, **B7**.2 was found to be expressed constitutively on

microglia and this expression was strongly enhanced following entorhinal lesion. This **B7**.1-/**B7**.2+ immune phenotype predicts Th2-immune responses, which are known to protect the central nervous system from **autoimmune** responses.

21/7/3 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

12832365 BIOSIS NO.: 200100039514
Costimulation blockade during ongoing R-EAE results in longlasting disease inhibition and stops epitope spreading.
AUTHOR: VanderLugt Carol L(a); Bluestone Jeffrey A; Miller Stephen D(a)
AUTHOR ADDRESS: (a)Department of Microbiology-Immunology, Northwestern University Medical School, Chicago, IL, 60611**USA
JOURNAL: FASEB Journal 14 (6):pA1102 April 20, 2000
MEDIUM: print
CONFERENCE/MEETING: Joint Annual Meeting of the American Association of Immunologists and the Clinical Immunology Society Seattle, Washington, USA May 12-16, 2000
ISSN: 0892-6638
RECORD TYPE: Citation
LANGUAGE: English
SUMMARY LANGUAGE: English

21/7/4 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

12657025 BIOSIS NO.: 200000410527
CD28 costimulatory blockade exacerbates disease severity and accelerates epitope spreading in a virus-induced **autoimmune** disease.
AUTHOR: Neville Katherine L; Dal Canto Mauro C; Bluestone Jeffrey A; Miller Stephen D(a)
AUTHOR ADDRESS: (a)Department of Microbiology-Immunology, Northwestern University Medical School, 303 E. Chicago Ave., Chicago, IL, 60611**USA
JOURNAL: Journal of Virclogy 74 (18):p8349-8357 September, 2000
MEDIUM: print
ISSN: 0022-538X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

ABSTRACT: Theiler's murine encephalomyelitis virus (TMEV) is a natural mouse pathogen which causes a lifelong persistent infection of the central nervous system (CNS) accompanied by T-cell-mediated myelin destruction leading to chronic, progressive hind limb paralysis. TMEV-induced demyelinating disease (TMEV-IDD) is considered to be a highly relevant animal model for the human **autoimmune** disease multiple sclerosis (MS), which is thought to be initiated as a secondary consequence of a virus infection. Although TMEV-IDD is initiated by virus-specific CD4+ T cells targeting CNS-persistent virus, CD4+ T-cell responses against self myelin protein epitopes activated via epitope spreading contribute to chronic disease pathogenesis. We thus examined the ability of antibodies directed against **B7** costimulatory molecules to regulate this chronic virus-induced immunopathologic process. Contrary to previous studies showing that blockade of **B7**-CD28 costimulatory interactions inhibit the initiation of experimental **autoimmune** encephalomyelitis, treatment of SJL mice at the time of TMEV infection with murine CTLA-4 immunoglobulin or a combination of **anti-B7**-1 and **anti-B7**-2 antibodies significantly enhanced clinical disease severity. Costimulatory blockade inhibited

early TMEV-specific T-cell and antibody responses critical in clearing peripheral virus infection. The inhibition of virus-specific immune responses led to significantly increased CNS viral titers resulting in increased damage to myelin-producing oligodendrocytes. Following clearance of the costimulatory antagonists, epitope spreading to myelin epitopes was accelerated as a result of the increased availability of myelin epitopes leading to a more severe chronic disease course. Our results raise concern about the potential use of **B7**-CD28 costimulatory blockade to treat human **autoimmune** diseases potentially associated with acute or persistent virus infections.

21/7/5 (Item 5 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

12549458 BIOSIS NO.: 200000302960
Hematopoietically derived retinal perivascular microglia initiate uveoretinitis in experimental **autoimmune** uveitis.
AUTHOR: Gullapalli Vamsi K; Zhang Jie; Pararajasegaram Geet; Rao Narsing A
AUTHOR ADDRESS: (a)1450 San Pablo Street, DVRC Rm 211, Los Angeles, CA, 90033-1088**USA
JOURNAL: Graefe's Archive for Clinical and Experimental Ophthalmology 238 (4):p319-325 April, 2000
MEDIUM: print
ISSN: 0721-832X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

ABSTRACT: Background: Hematopoietically derived cells in the retina were studied for the expression of molecules associated with antigen presentation. Methods: Bone marrow cells of (Lewis X Brown Norway) F1 rats (LBNF1) were transplanted to sublethally irradiated Brown Norway (BN) rats to construct chimeric rats (LBNF1fwdarwBN). Each of 21 established chimeras received an adoptive transfer of uveitogenic Lewis T lymphocytes. Three rats were killed on each of 7 consecutive days. The right eye of each rat was processed for flat-mount preparation of the retina; the left eye of each was frozen for cryostat sectioning. All tissues were then stained with one of the following antibodies: OX-3 (Lewis-specific MHC class II marker), anti-ICAM, **anti-B7**-1, anti-TNF-alpha or anti-IL-1beta. Results: Initial clinical signs of EAU appeared first on day 4; by day 6, full-blown EAU was noted. The flatmount preparations revealed the presence of OX-3+ cells in the retina, perivascularly exhibiting dendritic morphology on day 2. These cells were observed in the retinal nerve fiber layer (NFL). No **B7** -1+, ICAM-1+, TNF-alpha+ or IL-1beta+ cells were detected. Cryostat sections revealed positive cell staining of perivascular microglia and astrocytes in the retinal NFL with anti-IL-1beta and anti-TNF-alpha antibodies. Conclusions: Since only perivascular bone marrow-derived cells are seen to express MHC class II molecules prior to onset of EAU, and since these cells also generate the cytokines IL-1beta and TNF-alpha, it appears that initial presentation of antigen in the retina could be by these cells.

21/7/6 (Item 6 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

12261755 BIOSIS NO.: 200000015257
The role of costimulatory molecules **B7**-1 and **B7**-2 in mice with experimental **autoimmune** uveoretinitis.
AUTHOR: Fukai Tohru(a); Okada Annabelle A; Sakai Jun-ichi; Kezuka Takeshi;

Keino Hiroshi; Usui Masahiko; Yagita Hideo; Okumura Ko; Mizuguchi Junichiro
AUTHOR ADDRESS: (a)Department of Ophthalmology, Tokyo Medical College Hospital, 6-7-1 Nishishinjuku, Shinjuku-ku, Tokyo, 160**Japan
JOURNAL: Graefe's Archive for Clinical and Experimental Ophthalmology 237 (11):p928-933 Nov., 1999
ISSN: 0721-832X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

ABSTRACT: Background: Onset of experimental **autoimmune** uveoretinitis (EAU) is believed to involve a CD4-positive type 1 T helper cell (Th1) immune response, with inhibition involving a Th2 immune response. Development of Th1 and Th2 responses involves the participation of the costimulatory molecules **B7**-1 and **B7**-2, respectively. The purpose of this study was to investigate the role of **B7**-1 and **B7**-2 in the EAU model in mice. Methods: B10.A mice were immunized with interphotoreceptor retinoid-binding protein (IRBP) and given daily intraperitoneal injections of either phosphate-buffered saline (control), mouse monoclonal antibody (mAb) to **B7**-1, mAb to **B7**-2, or mAb to both **B7**-1 and **B7**-2. Eyes were evaluated by histopathological criteria and cytokines were assayed in culture medium of IRBP-stimulated lymphocytes. Cellular immune responses were measured by cell proliferation assay under IRBP stimulation. Results: Rates of EAU onset were 5/10 (50%) for control mice, 1/9 (11%) for mice treated with **anti- B7**-1 mAb, 5/6 (83%) for mice treated with **anti-B7**-2 mAb, and 2/6 (33%) for mice treated with both **anti-B7**-1 and **anti-B7**-2 mAb. Mean histopathological severity scores were 2.4+-0.8, 1.0+-0, 2.6+-1.0, and 1.0+-0, respectively. Production of IL-5 was significantly increased in mice treated with **anti-B7**-1 mAb, while IFN-gamma was increased in mice treated with **anti-B7**-2 mAb. Spleen cell proliferation was significantly reduced in mice treated with **anti-B7**-1 mAb. Conclusions: These results suggest that the costimulatory molecules **B7**-1 and **B7**-2, via their influence on generating Th1 and Th2 immune responses, play an important role in the clinical outcome of EAU in mice immunized with IRBP.

21/7/7 (Item 7 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

12215563 BIOSIS NO.: 199900510412
B7.1 costimulatory molecule is expressed on thyroid follicular cells in Hashimoto's thyroiditis, but not in Graves' disease.
AUTHOR: Battifora Michela; Pesce Giampaola; Paolieri Francesca; Fiorino Nicolo; Giordano Carla; Riccio Anna Maria; Torre Giancarlo; Olive Daniel; Bagnasco Marcello
AUTHOR ADDRESS: Allergy Clinical Immunol. Service, Dep. Internal Med.-DI.M.I. Univ. Genoa, Viale Benedetto XV,6, 16132 Genova**Italy
JOURNAL: Journal of Clinical Endocrinology & Metabolism 83 (11):p4130-4139 Nov., 1998
ISSN: 0021-972X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: The molecules of the **B7** family play a major role in T-lymphocyte costimulation through interaction with their counterreceptors CD28 and CTLA4. In the present study, we analyzed the possible expression of **B7** molecules on surgically removed thyroid tissue of patients with **autoimmune** (Hashimoto's thyroiditis (HT) or

Graves' disease (GD)) or nonautoimmune (nontoxic goiter (NTG) or papillary cancer (PC)) thyroid diseases. We found clear positivity of thyroid follicular cells for **B7**.1 in HT but not in GD, nor in nonautoimmune specimens (NTG, PC) using in situ analysis by alkaline phosphatase anti-alkaline phosphatase (APAAP) technique. Double immunostaining experiments in combination with an anti-human thyroglobulin antibody confirmed follicular **B7**.1 localization. On the contrary, no follicular **B7**.2 expression was observed in any specimen analyzed. These findings were confirmed by immunofluorescence flow cytometry on isolated follicular cells. The cytokines IL1beta and LPS were able to induce de novo **B7**.1 expression on cultured thyroid follicular cells. Intrathyroid T cells proved responsive to stimulation via the **B7** ligand CD28, even in the absence of IL2. Moreover preliminary evidence was obtained for an inhibitory effect of **anti-B7**.1 mAb on T-cell proliferation in coculture with isolated thyroid follicular cells. It is conceivable that in HT, expression of **B7**.1 on follicular cells, together with MHC class II antigens and ICAM1, could provide a local costimulatory signal for T-lymphocyte differentiation toward the type 1 cytokine secretion pattern and maintenance of the **autoimmune** process.

21/7/8 (Item 8 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

11958622 BIOSIS NO.: 199900204731
Effects of **anti-B7** monoclonal antibodies on humoral immune responses.
AUTHOR: Daikh David I(a); Wofsy David
AUTHOR ADDRESS: (a)Arthritis/Immunology Section (111R), Department of Veterans Affairs Medical Center, 4150 Clement**USA
JOURNAL: Journal of Autoimmunity 12 (2):p101-108 March, 1999
ISSN: 0896-8411
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English

ABSTRACT: The costimulatory interaction between CD28 on T cells and **B7**-related molecules on antigen presenting cells plays an important role in a broad range of functions of the immune system, including protective immunity, tolerance induction, allograft rejection, and the development of **autoimmune** diseases. Monoclonal antibodies to **B7**-1 and **B7**-2 have been used in vivo to examine the mechanisms underlying these processes and to evaluate costimulation antagonism as an approach to treatment of chronic **autoimmune** diseases. To determine whether **anti-B7** mAb might elicit, or inhibit, a host immune response that could influence the effects of these antibodies in vivo, we assessed the immune response to rat **anti-B7**-1 and **anti-B7**-2 mAb in healthy (BALB/c) mice and in lupus-prone NZB/NZW F1 (B/W) mice. In BALB/c mice, low doses (1-10 mug) of mAb to **B7**-1 and mAb to **B7**-2 elicited brisk immune responses that occurred earlier and were significantly greater than the immune response to an isotype-matched control rat mAb to ovalbumin. In contrast, at higher doses (100-500 mug), both **anti-B7** mAb, but not the control mAb, blocked the mouse anti-rat response. No such blockade occurred in B/W mice, who generated a significant mouse anti-rat response even at very high doses of **anti-B7** mAb (1,000-4,000 mug). Blockade of the immune response to the **anti-B7** mAb in BALB/c mice apparently did not reflect generalized immune suppression, because high doses of these mAb had little, if any effect on the humoral immune response to another antigen. These findings indicate that: (1) mAb to **B7**-1 and **B7**-2 can elicit either a potent immune response or no immune response at all depending upon the dose administered; (2)

blockade of the immune response to **anti-B7** mAb may be more difficult in the setting of **autoimmunity**; and (3) neither **anti-B7**-1 nor **anti-B7**-2 causes generalized suppression of humoral immunity.

21/7/9 (Item 9 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

11652677 BIOSIS NO.: 199800434408
Identification of conserved amino acids in murine **B7**-1IgV domain critical for CTLA4/CD28:**B7** interaction by site-directed mutagenesis: A novel structural model of the binding site.
AUTHOR: Guo Y; Wu Y; Kong X; Liu Y(a)
AUTHOR ADDRESS: (a)Michael Heidelberger Div. Immunol., Dep. Pathol., N.Y. Univ. Med. Cent., New York, NY 10016**USA
JOURNAL: Molecular Immunology 35 (4):p215-225 March, 1998
ISSN: 0161-5890
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: The **B7**:CD28/CTLA4 interaction plays a major role in T cell responses. Immune intervention targeted at this interaction has demonstrated a vast potential in enhancing tumor immunity and blocking **autoimmunity** and transplant rejection. However, the structural basis for this interaction is unclear. While we and others have performed site-directed mutagenesis to define amino acids involved in binding CD28 and CTLA4, these residues are localized in different regions, and it is unlikely for all of them to be directly involved. In addition, the effect of the mutations on the overall conformation of **B7** has not been systematically evaluated. In this study, we have carried out site-directed mutagenesis to define the amino acids within **B7**-1 IgV-like domain which participate **B7**:CD28/CTLA4 interaction. Four **anti-B7**-1 mAbs that recognize three independent antigenic epitopes on **B7**-1 were used to monitor the effect of mutations on the overall conformation of **B7**-1. Of the five mutations in the IgV domain that we have produced, D113 > A appears to interfere with cell surface expression and/or overall conformation of **B7**-1, while four others do not significantly affect the overall conformation and cell surface expression of **B7**-1. Among them, G115 > A and Y91 > A eliminated **B7**-1 binding to both CD28Ig and CTLA4Ig; our previously reported mutants L 109 > A and W88 > A selectively affect the **B7**-1 binding to either CD28Ig or CTLA4Ig. Structural modeling of **B7**-1 based on the structure of immunoglobulin revealed that these four and other previously identified critical amino acids in both IgV- and IgC-like domains can form a localized structure.

21/7/10 (Item 10 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

11254643 BIOSIS NO.: 199800035975
Treatment with intact **anti-B7**-1 mAb during disease remission enhances epitope spreading and exacerbates relapses in R-EAE.
AUTHOR: Vanderlugt Carol L; Karandikar Nitin L; Lenschow Deborah J; Dal Canto Mauro C; Bluestone Jeffrey A; Miller Stephen D(a)
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JOURNAL: Journal of Neuroimmunology 79 (2):p113-118 Nov., 1997
ISSN: 0165-5728
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RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: PLP139-151-induced experimental **autoimmune** encephalomyelitis in the SJL mouse is a Th1-mediated inflammatory demyelinating disease characterized by a relapsing-remitting clinical course (R-EAE). Clinical relapses are mediated by T cells specific for a non-cross reactive secondary PLP epitope (PLP178-191) induced by epitope spreading. We have previously shown that **B7**-1 expression is upregulated in SJL mice undergoing R-EAE and in vivo treatment during remission with F(ab) fragments of **anti-B7**-1 mAb, blocked epitope spreading and disease progression. In contrast, the present study shows that treatment with intact **anti-B7**-1 mAb exacerbated clinical disease relapses and enhanced CNS demyelination. **Anti-B7**-1-treated mice showed enhanced in vivo delayed-type hypersensitivity (DTH) to the relapse-associated PLP178-191 epitope and responses to the immunodominant MBP84-104 epitope which are absent in the controls. Thus, ligation of **B7**-1 by intact mAbs has effects opposite to those of **anti-B7**-1 F(ab) fragments suggesting that the mAb is directly signaling through **B7**-1 expressed on T cells and/or APCs.

21/7/11 (Item 11 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

10758877 BIOSIS NO.: 199799380022
Antigen presentation of autoreactive proteolipid protein peptide-specific T cell clones from chronic progressive multiple sclerosis patients: Roles of co-stimulatory **B7** molecules and IL-12.
AUTHOR: Correale Jorge(a); McMillan Minnie; Li Simon; McCarthy Kathleen; Le Thuy; Weiner Leslie P
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JOURNAL: Journal of Neuroimmunology 72 (1):p27-43 1997
ISSN: 0165-5728
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: To assess the role of T cell antigen (Ag) presentation in multiple sclerosis (MS), proteolipid protein (PLP) peptide reactive CD4+ T cell clones (TCCs) from MS patients and normal subjects were studied. TCCs derived from chronic progressive (CP) MS patients were able to proliferate and secret cytokines in response to PLP peptide stimulation in the absence of professional antigen presenting cells (APCs), suggesting that these T cells can simultaneously present and respond to Ags. However, they did not respond to total PLP protein, suggesting that PLP-peptide TCCs were unable to process and present the whole PLP molecule. The ability of the different TCCs to act as APCs in response to Ag stimulation did not correlate with expression of HLA-class II molecules. However, the degree of expression of **B7**-1 and **B7**-2 co-stimulatory molecules showed a significant correlation with APC capacity. Furthermore, a combination of **anti-B7**-1 and **anti-B7**-2 mAbs effectively inhibited proliferative responses as well as secretion of IL-10, IFN-gamma and TGF-beta induced by antigen presenting T cells. By contrast, IL-4 secretion was not affected. Finally, IL-12 significantly enhanced the efficiency of T cell Ag presentation by a pathway independent of Ag processing, suggesting that IL-12 might act as an additional co-stimulatory signal for T cell activation during T-T cell interactions. Together, these observations suggest that Au presentation by T cells might amplify and perpetuate an **autoimmune** response previously initiated by professional APCs. These properties may account for progression of MS into a CP phase.

21/7/12 (Item 12 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09885715 BIOSIS NO.: 199598340633
Effects of peripheral tolerance and **anti-B7** antibodies on disease relapses and epitope spreading in PLP-induced murine EAE.
AUTHOR: Miller Stephen D; Vanderlugt Carol J; McRae Bradford L; Lenschow Debra J; Bluestone Jeffrey A
AUTHOR ADDRESS: Dep. Micro-Immunol., Northwestern Univ. Med. Sch., Chicago, IL**USA
JOURNAL: Journal of Cellular Biochemistry Supplement 0 (21A):p148 1995
CONFERENCE/MEETING: Keystone Symposium on Control and Manipulation of the Immune Response Taos, New Mexico, USA March 16-22, 1995
ISSN: 0733-1959
RECORD TYPE: Citation
LANGUAGE: English

21/7/13 (Item 13 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09766314 BIOSIS NO.: 199598221232
B7-1 and **B7**-2 costimulatory molecules activate differentially the Th1/Th2 developmental pathways: Application to **autoimmune** disease therapy.
AUTHOR: Kuchroo Vijay K(a); Das Mercy Prabhu(a); Brown Julia A; Ranger Ann M; Zamvil Scott S; Sobel Raymond A; Weiner Howard L(a); Nabavi Nasrin; Glimcher Laurie H
AUTHOR ADDRESS: (a)Dep. Neurol., Harvard Med. Sch., Boston, MA 02115**USA
JOURNAL: Cell 80 (5):p707-718 1995
ISSN: 0092-8674
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: CD4 T helper precursor cells mature along two alternative pathways, Th1 and Th2. Here we show that these pathways are differentially activated by two costimulatory molecules, **B7**-1 and **B7**-2. Using **anti-B7** antibodies, this developmental step was manipulated both in vitro and in vivo in experimental allergic encephalomyelitis (EAE). **Anti-B7**-1 reduced the incidence of disease while **anti-B7**-2 increased disease severity. Neither antibody affected overall T cell induction but rather altered cytokine profile. Administration of **anti-B7**-1 at immunization resulted in predominant generation of Th2 clones whose transfer both prevented induction of EAE and abrogated established disease. Since cotreatment with anti-IL-4 antibody prevented disease amelioration, costimulatory molecules may directly affect initial cytokine secretion. Thus, interaction of **B7**-1 and **B7**-2 with shared counterreceptors CD28 and CTLA-4 results in very different outcomes in clinical disease by influencing commitment of precursors to a Th1 or Th2 lineage.

21/7/14 (Item 14 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09732031 BIOSIS NO.: 199598186949
Differential Effects of **Anti-B7**-1 and **Anti-B7**-2 Monoclonal Antibody Treatment on the Development of Diabetes in the Nonobese Diabetic Mouse.
AUTHOR: Lenschow Deborah J; Ho Stephen C; Sattar Husain; Rhee Lesley; Gray Gary; Nabavi Nasrin; Herold Kevan C; Bluestone Jeffrey A(a)

AUTHOR ADDRESS: (a)Ben May Inst., Univ. Chicago, MC1089, 5841 S. Maryland Ave., Chicago, IL 60637**USA
JOURNAL: Journal of Experimental Medicine 181 (3):p1145-1155 1995
ISSN: 0022-1007
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Insulin-dependent diabetes mellitus (IDDM) is thought to be an immunologically mediated disease resulting in the complete destruction of the insulin-producing islets of Langerhans. It has become increasingly clear that autoreactive T cells play a major role in the development and progression of this disease. In this study, we examined the role of the CD28/**B7** costimulation pathway in the development and progression of **autoimmune** diabetes in the nonobese diabetic (NOD) mouse model. Female NOD mice treated at the onset of insulitis (2-4 wk of age) with CTLA4Ig immunoglobulin (Ig) (a soluble CD28 antagonist) or a monoclonal antibody (mAb) specific for **B7**-2 (a CD28 ligand) did not develop diabetes. However, neither of these treatments altered the disease process when administered late, at gt 10 wk of age. Histological examination of islets from the various treatment groups showed that while CTLA41g and **anti-B7**-2 mAb treatment blocked the development of diabetes, these reagents had little effect on the development or severity of insulitis. Together these results suggest that blockade of costimulatory signals by CTLA4Ig or **anti-B7**-2 acts early in disease development, after insulitis but before the onset of frank diabetes. NOD mice were also treated with mAbs to another CD28 ligand, **B7**-1. In contrast to the previous results, the **anti-B7** -1 treatment significantly accelerated the development of disease in female mice and, most interestingly, induced diabetes in normally resistant male mice. A combination of **anti-B7**-1 and **anti-B7**-2 mAbs also resulted in an accelerated onset of diabetes, similar to that observed with **anti-B7**-1 mAb treatment alone, suggesting that **anti-B7**-1 mAb's effect was dominant. Furthermore, treatment with **anti-B7**-1 mAbs resulted in a more rapid and severe infiltrate. Finally, T cells isolated from the pancreases of these **anti-B7**-1-treated animals exhibited a more activated phenotype than T cells isolated from any of the other treatment groups. These studies demonstrate that costimulatory signals play an important role in the **autoimmune** process, and that different members of the **B7** family have distinct regulatory functions during the development of **autoimmune** diabetes.

21/7/15 (Item 15 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09261828 BIOSIS NO.: 199497270198
B7/BB1 provides an important costimulatory signal for CD3-mediated T lymphocyte proliferation in patients with systemic lupus erythematosus (SLE).
AUTHOR: Sfikakis P P(a); Oglesby R; Sfikakis P; Tsokos G C
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JOURNAL: Clinical and Experimental Immunology 96 (1):p8-14 1994
ISSN: 0009-9104
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Successful T cell activation via the T cell receptor (TCR)/CD3 complex requires at least one contact-dependent second signal delivered by costimulatory molecules, including the **B7**/BB1 molecule, that are present on antigen-presenting cells (APC). SLE is characterized by

multiple complex lymphocyte abnormalities of undefined molecular origin. It is currently unclear whether an intrinsic defect of T cell or an underlying APC dysfunction is responsible for defective in vitro proliferation of T cells from patients with SLE. We planned the present experiments to ask whether the TCR/CD3-mediated and **B7** /BB1-costimulated T cell proliferation is normal in these patients. We used enriched T cell populations that were stimulated with an anti-CD3 MoAb in the presence of controlled quantities of functional **B7**/BB1 antigen. Freshly isolated T cells from 17 SLE patients (10 and seven patients with either active or inactive disease, respectively) and 11 normal individuals were cocultured with irradiated **B7** /BB1-transfected P815 cells or parental P815 cells in the presence of OKT3 MoAb at optimal and suboptimal concentrations for 2.5-7 days. Normal or SLE T cells responded similarly to stimulation via anti-CD3, in the absence of **B7**/BB1 antigen. A several-fold increase in T cell proliferation in the presence of **B7**/BB1 antigen was observed. Proliferation was inhibited in the presence of **anti-B7**/BB1 MoAb, but not with control MoAbs. Interestingly, dose-response curves and time kinetics of **B7**/BB1 costimulation were similar in T cells from patients with either active or inactive SLE at the time of study, and normal individuals. In addition, no differences in the IL-2 receptor release by T cells cultured under these conditions were observed between SLE patients and normal individuals. These results demonstrate that CD28 signalling is not intrinsically impaired in patients with SLE; further studies to investigate whether abnormal **B7**/BB1 expression is involved in the **autoimmune** process are needed.

21/7/16 (Item 16 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

09239706 BIOSIS NO.: 199497248076
B7+-transfectant tubular epithelial cells induced T cell anergy, ignorance of proliferation.
AUTHOR: Yokoyama Hitoshi(a); Zheng Xinxiao; Strom Terry B; Kelley Vicki Rubin
AUTHOR ADDRESS: (a)Lab. Immunogenetic Transplantation, Brigham and Women's Hosptial, 75 Francis St., Boston, MA 021**USA
JOURNAL: Kidney International 45 (4):p1105-1112 1994
ISSN: 0085-2538
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: We have previously established that interferon (IFN)-gamma stimulated, antigen-pulsed tubular epithelial cells (TEC) stimulate antigen (Ag) specific activation of T cell hybridomas to express IL-2. In contrast, these Ag pulsed TEC do not stimulate T helper 1 (Th1) clones to proliferate, but rather render them unresponsive, since Ag pulsed spleen cells cannot restore these cells to proliferate. The interaction of the T cell CD28 surface protein with its ligand **B7** expressed on Ag presenting cells bearing Ia is a potent co-stimulatory signal capable of inducing T cell proliferation. Hence, the lack of **B7** on TEC was hypothesized to be responsible for anergy in these Th1 cells. Therefore, the **B7** gene was transfected into a SV40 transformed TEC or Chinese hamster ovary (CHO) cells, and created TEC and CHO cells expressing surface **B7** protein. TEC-**B7** (IFN-gamma stimulated, Ag pulsed) express Ia and induce IL-2 production by T cell hybridomas. In contrast, T cell proliferation was not induced by TEC-**B7** or CHO-**B7** cells; however, these Th1 cells were not anergic since they could be stimulated to proliferate to Ag pulsed spleen cells (immunological ignorance). However, co-cultivating TEC- **B7** (IFN-gamma stimulated, Ag pulsed) with Th1 cells stimulated through the T cell receptor (TCR) using anti-CD3 monoclonal antibody (mAb) caused these Th1 cells to

proliferate. Further-more, anti-CD28 and **anti-B7** mAbs blocked this response. These data suggest that the spectrum of Th1 cell activation after encounter with Ag is dictated by: (1) the vigor of TCR/CD3 signal, and (2) presence or absence of co-stimulatory signals through the CD28 pathway. Since expression of Ia on TEC induces anergy, this may serve as a mechanism to thwart-not foster-**autoimmunity**.

21/7/17 (Item 17 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

08960896 BIOSIS NO.: 199396112397
The **B7** adhesion molecule is expressed on activated human T cells: Functional involvement in T-T cell interactions.
AUTHOR: Wyss-Coray Tony; Mauri-Hellweg Daniela; Baumann Kaspar; Bettens Florence; Grunow Roland; Pichler Werner J(a)
AUTHOR ADDRESS: (a)Inst. Clinical Immunol., Inselspital, CH-3010 Bern** Switzerland
JOURNAL: European Journal of Immunology 23 (9):p2175-2180 1993
ISSN: 0014-2980
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: The B cell antigen **B7** delivers a strong co-stimulatory signal for the activation of T cells by binding to its ligands CD28 and CTLA-4. Here we demonstrate the surface expression of the **B7** molecule on activated human T cells in vitro and under certain conditions in vivo and its functional importance in T-T cell interactions. **B7** was detected by flow cytometry on antigen-specific CD4+ and allospecific CD8+ cloned T cells from different donors with **anti-B7** monoclonal antibody (mAb) or a soluble CTLA4-C-gamma-1 chimera molecule and by reverse transcription-polymerase chain reactions. The expression of **B7** was up-regulated following restimulation of the T cell clones and peaked after 7-9 days. Moreover, we show that the **B7** molecule on T cells is functionally involved in T-T cell interactions: mAb to CD28 and the CTLA4-Ig fusion protein could inhibit the proliferation of specific T cell clones in response to T cells as antigen-presenting cells (APC) or the proliferation of peripheral blood mononuclear cells in a primary allostimulation with activated T cells as stimulator cells. Finally, we found that **B7** can be expressed on freshly isolated circulating T cells since in a preliminary study with a limited number of patients, **B7** was present on a subset of CD3+ cells. **B7** was expressed on activated T cells (CD4+ and CD8+) of certain human immunodeficiency virus (HIV)-infected individuals (0.5-20% **B7**+CD8+ cells) or some patients with **autoimmune** diseases whereas CD3+ cells of healthy individuals did not express **B7**. The coexpression of major histocompatibility complex class II molecules and **B7** may be relevant for the capacity of activated T cells to function as APC. The expression of **B7** on T cells in vivo in **autoimmune** diseases and in HIV infection may be important for a better understanding of these diseases.

21/7/18 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

11186618 EMBASE No: 2001200214
IDEC-114 IDEC
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Current Opinion in Investigational Drugs (CURR. OPIN. INVEST. DRUGS) (United Kingdom) 2001, 2/5 (635-638)
CODEN: CIDRE ISSN: 0967-8298
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 28

IDEC is developing a PRIMATIZED-**anti-B7** antibody (IDEC-114) for the treatment of **autoimmune** and inflammatory diseases, such as psoriasis and rheumatoid arthritis. It is currently undergoing phase II trials in patients with psoriasis. A randomized, blind, placebo-controlled, multiple-dose phase II study was initiated in January 2001 to evaluate the potential clinical activity and safety of IDEC-114 in patients with moderate-to-severe psoriasis. The antibody targets the **B7** antigen on the surface of antigen-presenting cells that normally interact with T-cells to initiate an immune response. Antibodies directed at **B7** may be useful in preventing unwanted immune responses in **autoimmune** diseases such as systemic lupus erythematosus, idiopathic thrombocytopenic purpura as well as transplant rejection. PRIMATIZED antibodies, genetically engineered from cynomolgus macaque monkey and human components, are structurally indistinguishable from human antibodies. They may, therefore, be less likely to cause adverse reactions in humans, making them potentially suited for long-term, chronic treatment. IDEC has signed an antibody humanization patent licensing agreement with Protein Design Labs. IDEC is also collaborating with Mitsubishi-Tokyo (formerly Mitsubishi Kasei) on the development of this antibody.

21/7/19 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

11044779 EMBASE No: 2000386652
Blockade of costimulation through **B7**/CD28 inhibits experimental **autoimmune** uveoretinitis, but does not induce long-term tolerance
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Journal of Immunology (J. IMMUNOL.) (United States) 01 NOV 2000, 165/9 (5041-5047)
CODEN: JOIMA ISSN: 0022-1767
DOCUMENT TYPE: Journal ; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 49

It has been reported that costimulation blockade can result in T cell anergy. We investigated the effects of blocking costimulatory molecules in vivo on the development of experimental **autoimmune** uveoretinitis (EAU), a model for **autoimmune** uveitis in humans that is induced in mice by immunization with the retinal Ag interphotoreceptor retinoid binding protein. B10.A mice immunized with a uveitogenic regimen of interphotoreceptor retinoid-binding protein were treated with Abs to **B7**.1 and **B7**.2 for 2 wk. Evaluation of EAU and immunological responses 1 wk later showed that disease had been abrogated, and cellular responses were suppressed. To determine whether the costimulation blockade resulted in tolerance, adult-thymectomized mice immunized for uveitis and treated with **anti-B7** or anti-CD28 were rechallenged for uveitis induction 5 wk after the initial immunization. Although confirmed to be disease free after the initial immunization, both **anti-B7**- and anti-CD28-treated mice developed severe EAU and elevated cellular responses after the rechallenge, equivalent to those of control mice. We conclude that in this model costimulatory blockade in vivo prevents the development of **autoimmune** disease, but does not result in long-term tolerance. The data are compatible with the interpretation that **B7**/CD28 blockade

prevents generation of effector, but not of memory, T cells.

21/7/20 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE

10566623 EMBASE No: 2000030195
Pathologic role and temporal appearance of newly emerging autoepitopes in relapsing experimental **autoimmune** encephalomyelitis
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Journal of Immunology (J. IMMUNOL.) (United States) 15 JAN 2000, 164/2 (670-678)
CODEN: JOIMA ISSN: 0022-1767
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 41

Relapsing experimental **autoimmune** encephalomyelitis (R-EAE) is a CD4sup + T cell-mediated demyelinating disease model for multiple sclerosis. Myelin destruction during the initial relapsing phase of R-EAE in SJL mice initiated by immunization with the proteolipid protein (PLP) epitope PLPinf 1inf 3inf 9inf -inf 1inf 5inf 1 associated with activation of T cells specific for the endogenous, non-cross- reactive PLPinf 1inf 7inf 8inf -inf 1inf 9inf 1 epitope (intramolecular epitope spreading), while relapses in R-EAE induced with the myelin basic protein (MBP) epitope MBPinf 8inf 4inf -inf 1inf 0inf 4 are associated with PLPinf 1inf 3inf 9inf -inf 1inf 5inf 1-specific responses (intermolecular epitope spreading). Here, we demonstrate that T cells specific for endogenous myelin epitopes play the major pathologic role in mediating clinical relapses. T cells specific for relapse-associated epitopes can serially transfer disease to naive recipients and are demonstrable in the CNS of mice with chronic R-EAE. More importantly, induction of myelin- specific tolerance to relapse-associated epitopes, by i.v. injection of ethylene carbodiimide-fixed peptide-pulsed APCs, either before disease initiation or during remission from acute disease effectively blocks the expression of the initial disease relapse. Further, blockade of **B7**-1-mediated costimulation with **anti-B7**-1 F(ab) during disease remission from acute PLPinf 1inf 3inf 9inf -inf 1inf 5inf 1-induced disease prevents clinical relapses by inhibiting activation of PLPinf 1inf 7inf 8inf -inf 1inf 9inf 1-specific T cells. The protective effects of **anti-B7** -1 F(ab) treatment are long-lasting and highly effective even when administered following the initial relapsing episode wherein spreading to a MBP epitope (MBPinf 8inf 4inf -inf 1inf 0inf 4) is inhibited. Collectively, these data indicate that epitope spreading is **B7**-1 dependent, plays a major pathologic role in disease progression, and follows a hierarchical order associated with the relative encephalitogenic dominance of the myelin epitopes (PLPinf 1inf 3inf 9inf -inf 1inf 5inf 1 > PLPinf 1inf 7inf 8inf -inf 1inf 9inf 1 > MBPinf 8inf 4inf -inf 1inf 0inf 4).

21/7/21 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE

10543915 EMBASE No: 2000009180
A critical role for **B7**/CD28 costimulation in experimental **autoimmune** encephalomyelitis: A comparative study using costimulatory molecule-deficient mice and monoclonal antibody blockade
Girvin A.M.; Dal Canto M.C.; Rhee L.; Salomon B.; Sharpe A.; Bluestone J.A.; Miller S.D.

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Journal of Immunology (J. IMMUNOL.) (United States) 01 JAN 2000, 164/1 (136-143)
CODEN: JOIMA ISSN: 0022-1767
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 47

The **B7**/CD28 pathway provides critical costimulatory signals required for complete T cell activation and has served as a potential target for immunotherapeutic strategies designed to regulate **autoimmune** diseases. This study was designed to examine the roles of CD28 and its individual ligands, **B7**-1 and **B7**-2, in experimental **autoimmune** encephalomyelitis (EAE), a Th1- mediated inflammatory disease of the CNS. EAE induction in CD28- or **B7**- deficient nonobese diabetic (NOD) mice was compared with the effects of **B7**/CD28 blockade using Abs in wild-type NOD mice. Disease severity was significantly reduced in CD28-deficient as well as **anti**-**B7**-1/**B7**-2-treated NOD mice. **B7**-2 appeared to play the more dominant role as there was a moderate decrease in disease incidence and severity in **B7**-2-deficient animals. EAE resistance was not due to the lack of effective priming of the myelin peptide-specific T cells in vivo. T cells isolated from CD28-deficient animals produced equivalent amounts of IFN-gamma and TNF-alpha in response to the immunogen, proteolipid protein 56-70. In fact, IFN-gamma and TNF-alpha production by Ag-specific T cells was enhanced in both the **B7**-1 and **B7**-2-deficient NOD mice. In contrast, peptide-specific delayed-type hypersensitivity responses in these animals were significantly decreased, suggesting a critical role for CD28 costimulation in in vivo trafficking and systemic immunity. Collectively, these results support a critical role for CD28 costimulation in EAE induction.

21/7/22 (Item 5 from file: 73)
DIALOG(R)File 73:EMBASE

07878606 EMBASE No: 1999359660
The role of costimulatory molecules **B7**-1 and **B7**-2 in mice with experimental antoimmune uveoretinitis
Fukai T.; Okada A.A.; Sakai J.-I.; Kezuka T.; Keino H.; Usui M.; Yagita H.; Okumura K.; Mizuguchi J.
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Graefe's Archive for Clinical and Experimental Ophthalmology (GRAEFE'S ARCH. CLIN. EXP. OPHTHALMOL.) (Germany) 1999, 237/11 (928-933)
CODEN: GACOD ISSN: 0721-832X
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 24

Background: Onset of experimental **autoimmune** uveoretinitis (EAU) is believed to involve a CD4-positive type 1 T helper cell (Th1) immune response, with inhibition involving a Th2 immune response. Development of Th1 and Th2 responses involves the participation of the costimulatory molecules **B7**-1 and **B7**-2, respectively. The purpose of this study was to investigate the role of **B7**-1 and **B7**-2 in the EAU model in mice. Methods: B10.A mice were immunized with interphotoreceptor retinoid-binding protein (IRBP) and given daily intraperitoneal injections of either phosphate-buffered saline (control), mouse monoclonal antibody (mAb) to **B7**-1, mAb to **B7**-2, or mAb to both **B7**-1 and **B7**-2. Eyes were evaluated by histopathological criteria and cytokines were assayed in culture medium of IRBP-stimulated lymphocytes. Cellular

immune responses were measured by cell proliferation assay under IRBP stimulation. Results: Rates of EAU onset were 5/10 (50%) for control mice, 1/9 (11%) for mice treated with **anti-B7**-1 mAb, 5/6 (83%) for mice treated with **anti-B7**-2 mAb, and 2/6 (33%) for mice treated with both **anti-B7**-1 and **anti-B7**-2 mAb. Mean histopathological severity scores were 2.4 +/- 0.8, 1.0 +/- 0, 2.6 +/- 1.0, and 1.0 +/- 0, respectively. Production of IL-5 was significantly increased in mice treated with **anti-B7**-1 mAb, while IFN-gamma was increased in mice treated with **anti-B7**-2 mAb. Spleen cell proliferation was significantly reduced in mice treated with **anti-B7**-1 mAb. Conclusions: These results suggest that the costimulatory molecules **B7**-1 and **B7**-2, via their influence on generating Th1 and Th2 immune responses, play an important role in the clinical outcome of EAU in mice immunized with IRBP.

21/7/23 (Item 6 from file: 73)
DIALOG(R)File 73:EMBASE

07802209 EMBASE No: 1999284603
B7 costimulation in the development of lupus: **Autoimmunity** arises either in the absence of **B7**.1/**B7**.2 or in the presence of **anti-B7**.1/**B7**.2 blocking antibodies
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LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 42

Costimulatory molecules, termed **B7**.1 and **B7**.2, are present on the surfaces of APC and are important for the activation of T lymphocytes specific for both foreign Ags and autoantigens. We have examined the role of **B7** costimulation in the MRL-lpr/lpr murine model of human systemic lupus erythematosus. MRL-lpr/lpr mice receiving both **anti-B7**.1 and **anti-B7**.2 Abs expressed significantly lower anti-small nuclear ribonucleoprotein particles (snRNP) and anti-dsDNA autoantibodies than did untreated mice. **Anti-B7**.2 Ab treatment alone inhibited anti-dsDNA autoantibody expression while having no effect on anti-snRNP autoantibody expression. **Anti-B7**.1 Ab treatment alone did not change the expression of either anti-snRNP or anti-dsDNA autoantibodies. Parallel studies performed in MRL-lpr/lpr mice genetically deficient in either **B7**.1 or **B7**.2 expressed autoantibody profiles comparable to those found in wild-type MRL-lpr/lpr mice. However, **B7**.1-deficient MRL- lpr/lpr mice exhibited distinct and more severe glomerulonephritis while **B7**.2-deficient MRL-lpr/lpr mice had significantly milder or absent kidney pathology as compared with age-matched wild-type mice. These studies indicate that each **B7** costimulatory signal may control unique pathological events in murine systemic lupus erythematosus that may not always be apparent in autoantibody titers alone.

21/7/24 (Item 7 from file: 73)
DIALOG(R)File 73:EMBASE

07802138 EMBASE No: 1999284532
Strain variation in **autoimmunity**: Attempted tolerization of DA rats results in the induction of experimental **autoimmune** encephalomyelitis
Lenz D.C.; Wolf N.A.; Swanborg R.H.

Dr. R.H. Swanborg, Dept. of Immunology and Microbiology, Wayne State Univ. School of Medicine, 540 East Canfield, Detroit, MI 48201 United States
Journal of Immunology (J. IMMUNOL.) (United States) 15 AUG 1999, 163/4 (1763-1768)
CODEN: JOIMA ISSN: 0022-1767
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 33

This paper reports that DA rats develop experimental **autoimmune** encephalomyelitis (EAE) when immunized with encephalitogenic myelin basic protein (MBP) peptide (MBP63-81) in IFA. In contrast, most rodent strains are tolerized by this procedure. Doses as low as 5 mug peptide + IFA induced EAE in DA rats. Lewis (LEW) rats did not develop EAE, even after immunization with 100 mug encephalitogenic peptide (MBP68-86) + IFA, but were rendered tolerant to EAE. DA rat T cells proliferated to peptide, and proliferation was inhibited by CTLA4Ig, and by **anti-B7**.1 and **anti-B7**.2 mAbs. This indicates that the ease of induction of EAE in this strain does not reflect a decreased requirement for T cell costimulation through the **B7**/CD28 costimulatory pathway. The inhibitory effect of CTLA4Ig was abrogated in the presence of anti-TGF-beta-neutralizing Ab. An encephalitogenic DA T cell line expressed mRNA for the Th1 cytokines IFN-gamma and TNF-alpha, as well as IL-10, and secreted these cytokines. In contrast, a T cell line from peptide + IFA-immunized LEW rats (which did not develop EAE) failed to secrete these cytokines. Although this line did not express TNF-alpha or IL-10 mRNA, IFN-gamma mRNA was detected, suggesting posttranscriptional regulation of IFN-gamma expression. Attempts to induce unresponsiveness in DA rats with encephalitogenic peptide-coupled splenocytes were also unsuccessful.

07753052 EMBASE No: 1999235948
Autoantibodies to T cell costimulatory molecules in systemic **autoimmune** diseases
Matsui T.; Kurokawa M.; Kobata T.; Oki S.; Azuma M.; Tohma S.; Inoue T.; Yamamoto K.; Nishioka K.; Kato T.
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Journal of Immunology (J. IMMUNOL.) (United States) 01 APR 1999, 162/7 (4328-4335)
CODEN: JOIMA ISSN: 0022-1767
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 52

To determine whether antilymphocyte Abs to T cell costimulatory molecules are generated in patients with **autoimmune** diseases and, if they exist, to clarify the mechanism of their production and pathological roles, we investigated the presence of autoantibodies to CTLA-4 (CD152), CD28, **B7**-1 (CD80), and **B7**-2 (CD86) in serum samples obtained from patients with various **autoimmune** diseases and from normal subjects using recombinant fusion proteins. In ELISAs, anti-CD28, **anti-B7**-1, and **anti-B7**-2 Abs were rarely seen, whereas anti-CTLA-4 Abs were detected in 8.2% of the patients with systemic lupus erythematosus, 18.8% of those with rheumatoid arthritis, 3.1% of those with systemic sclerosis, 31.8% of those with Behcet's disease, 13.3% of those with Sjogren's syndrome, and 0% of healthy donors. This reactivity was confirmed by immunoblotting. More importantly, the purified anti-CTLA-4 Abs

reacted with CTLA-4 expressed on P815 cells by flow cytometry. In addition, we found at least three epitopes on the CTLA-4 molecule. Furthermore, among the patients with Behcet's disease, uveitis was seen significantly less frequently in the anti-CTLA-4 Ab-positive patients. Taken collectively, these data indicate that anti-CTLA-4 autoantibodies are generated in systemic **autoimmune** diseases by an Ag-driven mechanism and may modulate the immune response in vivo by binding to CTLA-4 on T cells.

21/7/26 (Item 9 from file: 73)
DIALOG(R)File 73:EMBASE

07749108 EMBASE No: 1999231131
B7.2 has opposing roles during the activation versus effector stages of experimental **autoimmune** thyroiditis
Peterson K.E.; Sharp G.C.; Tang H.; Braley-Mullen H.
Dr. H. Braley-Mullen, Dept. of Internal Medicine, M450 Med. Sci. Bldg., University of Missouri, 1 Hospital Drive, Columbia, MO 65212 United States
Journal of Immunology (J. IMMUNOL.) (United States) 01 FEB 1999, 162/3 (1859-1867)
CODEN: JOIMA ISSN: 0022-1767
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 48

APCs provide costimulatory and down-regulatory signals to Ag-activated T cells through interactions between **B7**.1 and **B7**.2 on APCs with either CD28 or CTL Ag-4 expressed on T cells. Recipients of mouse thyroglobulin (MTg)- primed spleen cells activated in the presence of **anti-B7**.2 had decreased experimental **autoimmune** thyroiditis (EAT) severity compared with recipients of cells cultured with control rat Ig or **anti-B7**.1. Blocking **B7**.2 during in vivo priming also suppressed the ability of MTg-primed spleen cells to transfer EAT, implicating a role for **B7**.2 for priming and in vitro activation of EAT effector cells. In contrast, administration of **anti-B7**.2 or **anti-B7**.2 Fab to recipients of MTg-activated spleen cells increased the severity of EAT compared with recipients receiving control Ig. Thyroids from **anti-B7**.2- treated recipients had increased expression of IL-4 mRNA compared with thyroids from rat Ig-treated controls. Both **B7**.1 and **B7**.2 molecules were expressed in the thyroids of mice with EAT, although **B7**.2 was more prevalent than **B7**.1. Administration of both **anti-B7**.1 and **anti-B7**.2 to recipient mice suppressed the development of EAT, while **anti-B7**.1 treatment alone had no effect on EAT severity. The suppression of EAT was not observed when **anti- B7**.1 and **anti-B7**.2 treatment was delayed until 7 days after cell transfer, suggesting a requirement for **B7** in the initiation of EAT in recipient mice. These results suggest that costimulation is required during the effector phase of EAT and that **B7**.2 may have opposing roles in the activation versus effector stages of autoreactive T cells.

21/7/27 (Item 10 from file: 73)
DIALOG(R)File 73:EMBASE

07414120 EMBASE No: 1998321352
The functional significance of epitope spreading and its regulation by co-stimulatory molecules
Vanderlugt C.L.; Smith Begolka W.; Neville K.L.; Katz-Levy Y.; Howard L.M.; Eager T.N.; Bluestone J.A.; Miller S.D.
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Immunological Reviews (IMMUNOL. REV.) (Denmark) 1998, 164/- (63-72)
CODEN: IMRED ISSN: 0105-2896
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 58

Epitope spreading is a process whereby epitopes distinct from and non-cross-reactive with an inducing epitope become major targets of an ongoing immune response. This phenomenon has been defined in experimental and natural situations as a consequence of acute or persistent infection and secondary to chronic tissue destruction that occurs during progressive **autoimmune** disease. We have investigated the functional significance of this process in the chronic stages of both **autoimmune** and virus-induced central nervous system (CNS) demyelinating disease models in the SJL/J mouse. During the relapsing-remitting course of experimental **autoimmune** encephalomyelitis (R-EAE) induced with defined

4

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                                    bbb                lll
                                     bb                 ll
pp ppp    ggg gg  aaaa    mm  mm    bb       eeee      ll
 pp  pp gg  gg       aa  mmmmmmmm  bbbbb  ee  ee     ll
 pp  pp gg  gg    aaaaa  mmmmmmmm  bb  bb eeeeee     ll
 ppppp   ggggg  aa  aa   mm m mm  bb  bb ee          ll
 pp         gg   aaa aa mm    mm bb bbb   eeee     llll
pppp    ggggg
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8/1/01

21/7/27 (Item 10 from file: 73)
DIALOG(R)File 73:EMBASE

07414120 EMBASE No: 1998321352
The functional significance of epitope spreading and its regulation by co-stimulatory molecules
Vanderlugt C.L.; Smith Begolka W.; Neville K.L.; Katz-Levy Y.; Howard L.M.; Eager T.N.; Bluestone J.A.; Miller S.D.
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AUTHOR EMAIL: s-d-miller@nwu.edu
Immunological Reviews (IMMUNOL. REV.) (Denmark) 1998, 164/- (63-72)
CODEN: IMRED ISSN: 0105-2896
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 58

Epitope spreading is a process whereby epitopes distinct from and non-cross-reactive with an inducing epitope become major targets of an ongoing immune response. This phenomenon has been defined in experimental and natural situations as a consequence of acute or persistent infection and secondary to chronic tissue destruction that occurs during progressive **autoimmune** disease. We have investigated the functional significance of this process in the chronic stages of both **autoimmune** and virus-induced central nervous system (CNS) demyelinating disease models in the SJL/J mouse. During the relapsing-remitting course of experimental **autoimmune** encephalomyelitis (R-EAE) induced with defined encephalitogenic myelin peptides, CD4sup + T cells specific for endogenous epitopes on both the initiating myelin protein (intramolecular epitope spreading) and distinct myelin proteins (intermolecular epitope spreading) are primed secondary to myelin destruction during acute disease and play a major functional role in mediating disease relapses. Similarly, epitope spreading to endogenous myelin epitopes appears to play a major functional role in the chronic-progressive course of Theiler's murine encephalomyelitis virus-induced demyelinating disease (TMEV-IDD), a virus-induced CD4sup + T-cell-mediated immunopathology. In TMEV-IDD, myelin destruction is initiated by virus-specific CD4sup + T cells which target virus epitopes persisting in CNS-derived antigen-presenting cells. However, the chronic stage of this progressive disease is associated with the activation of CD4sup + T cells specific for multiple myelin epitopes. In both models, the temporal course of T-cell activation occurs in a hierarchical order of epitope dominance, spreading first to the most immunodominant epitope and progressing to lesser immunodominant epitopes. In addition, epitope spreading in R-EAE is regulated predominantly by CD28/**B7**-1 co-stimulatory interactions, as antagonism of **B7**-1-mediated co-stimulation using **anti-B7**-1 F(ab) fragments is an effective ameliorative therapy for ongoing disease. The process of epitope spreading has obvious important implications for the design of antigen-specific therapies for the treatment of **autoimmune** disease since these therapies will have to identify and target endogenous self epitopes associated with chronic tissue destruction.

21/7/28 (Item 11 from file: 73)
DIALOG(R)File 73:EMBASE

07006353 EMBASE No: 1997292794
Autopathogenic T helper cell type 1 (Th1) and protective Th2 clones differ in their recognition of the autoantigenic peptide of myelin proteolipid protein
Das M.P.; Nicholson L.B.; Greer J.M.; Kuchroo V.K.
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Journal of Experimental Medicine (J. EXP. MED.) (United States) 1997, 186/6 (867-876)
CODEN: JEMEA ISSN: 0022-1007
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 33

We previously generated a panel of T helper cell 1 (Th1) clones specific for an encephalitogenic peptide of myelin proteolipid protein (PLP) peptide 139-151 (HSLGKWLGHPDKF) that induces experimental **autoimmune** encephalomyelitis (EAE) upon adoptive transfer. In spite of the differences in their T cell receptor (TCR) gene usage, all these Th1 clones required W144 as the primary and most critical TCR contact residue for the activation. In this study, we determined the TCR contact residues of a panel of Th2/Th0 clones specific for the PLP peptide 139-151 generated either by immunization with the PLP 139-151 peptide with **anti-B7-1** antibody or by immunization with an altered peptide Q144. Using alanine-substituted peptide analogues of the native PLP peptide, we show that the Th2 clones have shifted their primary contact residue to the NHinf 2-terminal end of the peptide. These Th2 cells do not show any dependence on the W144, but show a critical requirement for L141/G142 as their major TCR contact residue. Thus, in contrast with the Th1 clones that did not proliferate to A144-substituted peptide, the Th2 clones tolerated a substitution at position 144 and proliferated to A144 peptide. This alternative A144 reactive repertoire appears to have a critical role in the regulation of **autoimmune** response to PLP 139-151 because preimmunization with A144 to expand the L141/G142-reactive repertoire protects mice from developing EAE induced with the native PLP 139-151 peptide. These data suggest that a balance between two different T cell repertoires specific for same autoantigenic epitope can determine disease phenotype, i.e., resistance or susceptibility to an **autoimmune** disease.

21/7/29 (Item 12 from file: 73)
DIALOG(R)File 73:EMBASE

06432093 EMBASE No: 1996083792
Blockade of CD28/**B7**-1 interaction prevents epitope spreading and clinical relapses of murine EAE
Miller S.D.; Vanderlugt C.L.; Lenschow D.J.; Pope J.G.; Karandikar N.J.; Dal Canto M.C.; Bluestone J.A.
Department Microbiology-Immunology, Interdepartmental Immunobiology Ctr, Northwestern Univ. Medical School,Chicago, IL 60611 United States
Immunity (IMMUNITY) (United States) 1995, 3/6 (739-745)
CODEN: IUNIE ISSN: 1074-7613
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Relapsing experimental **autoimmune** encephalomyelitis (R-EAE) induced with the immunodominant epitope from proteolipid protein, PLP(139-151), is characterized by the development of recurrent relapses with recruitment of T cells reactive to additional myelin peptides, including PLP(178-191) (epitope spreading). In this study, we have determined that the CD28/**B7** costimulatory pathway is involved in this process. We found

preferential up-regulation of **B7**-1 during the course of R-EAE and a selective increase in its functional costimulatory activity, relative to **B7**-2. **Anti B7**-1 F(ab) fragment therapy, but not **anti B7**-2 MAb therapy, blocked clinical relapses, ameliorated CNS pathology, and blocked epitope spreading. These results suggest that the maintenance of **autoimmune** reactivity in EAE depends on CD28/**B7**-1-dependent costimulation of newly recruited T cells responsible for epitope spreading. These studies have important implications for the role of epitope spreading in disease progression and the clinical application of costimulatory antagonists in **autoimmune** diseases.

21/7/30 (Item 13 from file: 73)
DIALOG(R)File 73:EMBASE

05826457 EMBASE No: 1994236103
B7sup +-transfectant tubular epithelial cells induce T cell anergy, ignorance or proliferation
Yokoyama H.; Zheng X.; Strom T.B.; Kelley V.R.
Immunogenetics/Transplantation Lab., Brigham and Women's Hospital, 75 Francis Street,Boston, MA 02115 United States
Kidney International (KIDNEY INT.) (United States) 1994, 45/4 (1105-1112)
CODEN: KDYIA ISSN: 0085-2538
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

We have previously established that interferon (IFN)-gamma stimulated, antigen-pulsed tubular epithelial cells (TEC) stimulate antigen (Ag) specific activation of T cell hybridomas to express IL-2. In contrast, these Ag pulsed TEC do not stimulate T helper 1 (Th1) clones to proliferate, but rather render them unresponsive, since Ag pulsed spleen cells cannot restore these cells to proliferate. The interaction of the T cell CD28 surface protein with its ligand **B7** expressed on Ag presenting cells bearing Ia is a potent co- stimulatory signal capable of inducing T cell proliferation. Hence, the lack of **B7** on TEC was hypothesized to be responsible for anergy in these Th1 cells. Therefore, the **B7** gene was transfected into a SV40 transformed TEC or Chinese hamster ovary (CHO) cells, and created TEC and CHO cells expressing surface **B7** protein. TEC-**B7** (IFN-gamma stimulated, Ag pulsed) express Ia and induce IL-2 production by T cell hybridomas. In contrast, T cell proliferation was not induced by TEC-**B7** or CHO-**B7** cells; however, these Th1 cells were not anergic since they could be stimulated to proliferate to Ag pulsed spleen cells (immunological ignorance). However, co-cultivating TEC- **B7** (IFN-gamma stimulated, Ag pulsed) with Th1 cells, stimulated through the T cell receptor (TCR) using anti-CD3 monoclonal antibody (mAb) caused these Th1 cells to proliferate. Furthermore, anti-CD28 and **anti-B7** mAbs blocked this response. These data suggest that the spectrum of Th1 cell activation after encounter with Ag is dictated by: (1) the vigor of TCR/CD3 signal, and (2) presence or absence of co-stimulatory signals through the CD28 pathway. Since expression of Ia on TEC induces anergy, this may serve as a mechanism to thwart - not foster - **autoimmunity**.

21/7/31 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10341523 99370040 PMID: 10438973
B7.2 (CD86) but not **B7**.1 (CD80) costimulation is required for the induction of low dose oral tolerance.
Liu L; Kuchroo VK; Weiner HL
Center for Neurologic Diseases, Brigham and Women's Hospital, Harvard Medical School, Boston, MA 02115, USA.

Journal of immunology (UNITED STATES) Aug 15 1999, 163 (4) p2284-90, ISSN 0022-1767 Journal Code: IFB
Contract/Grant No.: AI43458, AI, NIAID
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

Oral administration of Ag leads to systemic unresponsiveness (oral tolerance) to the fed Ag. Oral tolerance is mediated through active suppression by Th2 or TGF-beta-secreting cells or clonal anergy/deletion, depending on the Ag dose used, with low dose favoring active suppression and high dose favoring anergy/deletion. The nature of APC and inductive events leading to the generation of oral tolerance have not been well defined. To determine the role of costimulatory molecules in the induction of oral tolerance, we have tested the effect of **anti-B7**.1 or **anti-B7** .2 mAb on the induction of tolerance by both high and low dose Ag feeding regimens. Our results show that the **B7**.2 molecule is critical for the induction of low-dose oral tolerance. Injection of **anti-B7**.2 but not **anti-B7** .1 intact Ab or Fab fragments inhibited the oral tolerance induced by low-dose (0.5 mg) but not high-dose OVA (25 mg) feeding. In addition, **anti-B7**.2, but not **anti-B7** .1, inhibited secretion of TGF-beta, one of the primary cytokines that mediates low-dose oral tolerance. Finally, in the in vivo model of experimental allergic encephalomyelitis, **anti-B7**.2 mAb treatment abrogated protection offered against disease by low-dose myelin basic protein feeding, while **anti-B7**.1 had no effect. **Anti B7** .2 had no effect on disease suppression by high-dose oral Ag. These data demonstrate that **B7**.2 costimulatory molecules play an essential role in the induction of low-dose oral tolerance.

Record Date Created: 19990909

21/7/32 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09467618 97330183 PMID: 9186642

B lymphocytes as autoantigen-presenting cells in the amplification of **autoimmunity**.

Roth R; Gee RJ; Mamula MJ
Section of Rheumatology, Yale University School of Medicine, New Haven, Connecticut 06520, USA.

Annals of the New York Academy of Sciences (UNITED STATES) Apr 5 1997, 815 p88-104, ISSN 0077-8923 Journal Code: 5NM
Contract/Grant No.: AI36529, AI, NIAID; AR41032, AR, NIAMS
Languages: ENGLISH
Document type: Journal Article
Record type: Completed

The exact role of B cells in antigen presentation to naive T cells in vivo is presently not known. Here, we demonstrate the ability of a B cell subset consisting of **B7**-2pos-B cells to prime autoreactive T cells in B cell-deficient mice. In contrast, B cell-deficient mice are unable to mount a similar initiation and expansion of the **autoimmune** response. The expression of the **B7** -2 costimulatory molecule as well as the specificity to a self-antigen, either murine cytochrome c or murine ribonucleoproteins (the target of **autoimmunity** in SLE), enabled B cells as antigen-presenting cells to induce naive lymph node T cells to proliferate and to express IFN-gamma, IL-4, IL-5, and IL-10 cytokine mRNAs. In contrast, neither adoptively transferred **B7** -2neg-B cells nor nonspecific **B7** -2pos-B cells were able to activate naive T cells. In addition, **anti-B7**-2 treatment prevented the in vivo expression of the IL-4, IL-5, and IFN-gamma cytokine mRNA responses. Our results suggest a major role of autoantigen-specific **B7**-2pos-B cells in breaking T cell tolerance to self-antigen.

Record Date Created: 19970718

21/7/33 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09380173 97376839 PMID: 9233610
The role of donor and recipient **B7**-1 (CD80) in allograft rejection.
Zheng XX; Sayegh MH; Zheng XG; Li Y; Linsley PS; Peach R; Borriello F; Strom TB; Sharpe AH; Turka LA
Department of Medicine, Beth-Israel Deaconess Medical Center, Boston, MA 02215, USA.
Journal of immunology (UNITED STATES) Aug 1 1997, 159 (3) p1169-73, ISSN 0022-1767 Journal Code: IFB
Contract/Grant No.: AI37691, AI, NIAID; AI37798, AI, NIAID
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Blockade of CD28-mediated T cell costimulatory signals produces effective immunosuppression of a variety of T cell-dependent in vivo immune responses, including **autoimmune** disorders and transplant rejection. The soluble fusion protein CTLA4Ig, which competitively blocks CD28 ligands **B7**-1 and **B7** -2, can prevent allograft and xenograft rejection and in some circumstances induce transplantation tolerance. To determine the relative roles of **B7**-1 and **B7**-2 in graft rejection, we have performed islet and cardiac allografts with normal and **B7**-1(-/-) mice in conjunction with selective blocking reagents. We found that the absence of **B7**-1 on donor or recipient tissues leads to a slight prolongation of islet allograft survival, but has minimal or no effect on cardiac allograft survival. Allograft function is further prolonged in the islet model when both donor and recipient lack **B7**-1, although cardiac allograft survival is not prolonged. In the cardiac model, treatment with CTLA4Ig induces long term survival in **B7**-1(-/-) recipients regardless of donor status. In contrast, **anti-B7**-2 mAb leads to indefinite allograft survival only when the recipient and donor both lack **B7**-1, indicating that even in the absence of available **B7**-2, **B7**-1 molecules on the donor or recipient cells alone are sufficient to induce graft rejection. These data also indicate that **B7**-1 and **B7**-2 are the only CD28 ligands relevant to cardiac allograft rejection in mice.
Record Date Created: 19970814

21/7/34 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09253561 97146028 PMID: 8992975
IFN-gamma-activated primary murine astrocytes express **B7** costimulatory molecules and prime naive antigen-specific T cells.
Nikcevich KM; Gordon KB; Tan L; Hurst SD; Kroepfl JF; Gardinier M; Barrett TA; Miller SD
Department of Microbiology-Immunology, Northwestern University Medical School, Chicago, IL 60611, USA.
Journal of immunology (UNITED STATES) Jan 15 1997, 158 (2) p614-21, ISSN 0022-1767 Journal Code: IFB
Contract/Grant No.: NS-26543, NS, NINDS; NS-30871, NS, NINDS; NS-34819, NS, NINDS; +
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Astrocytes may serve as effectual APCs for T cell-mediated immune responses to myelin components during multiple sclerosis and experimental **autoimmune** encephalomyelitis (EAE). Although astrocytes have been reported not to constitutively express MHC class II molecules, expression is up-regulated during active EAE and by in vitro incubation with IFN-gamma. Previous studies have reported that cytokine-activated astrocytes are able to activate Ag-specific previously activated T cells, but not naive alloreactive T cells. In the current study, we show that a subset of primary murine astrocytes constitutively expresses **B7**-2

molecules, as determined by FACS and PCR analyses, and up-regulates surface expression and mRNA levels of both **B7**-2 and **B7**-1 upon IFN-gamma stimulation. In contrast to earlier reports, we found that both untreated and IFN-gamma-treated astrocytes were able to stimulate proliferation of previously activated OVA-specific Th1 cells. In contrast, only IFN-gamma-treated astrocytes activated naive, transgenic OVA-specific T cells. Astrocyte-induced activation of both OVA-specific naive T cells and activated Th1 cells was dependent primarily on **B7** -2-mediated costimulation, as proliferation was inhibited by CTLA4-Ig and by **anti** **-B7** -2 mAbs. These results suggest that astrocytes in an inflammatory environment have the capacity to express the required MHC class II and **B7** costimulatory molecules necessary for efficient activation of naive T cells. Since we have shown that T cells specific for endogenous myelin epitopes released during acute EAE play the major pathologic effector role in subsequent disease relapses (epitope spreading), astrocytes could play a role in the local activation and expansion of these responses.

Record Date Created: 19970211

21/7/35 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09009029 96413237 PMID: 8816399

Activation of human T cell lymphotropic virus type I-infected T cells is independent of **B7** costimulation.

Scholz C; Freeman GJ; Greenfield EA; Hafler DA; Hollsberg P

Laboratory of Molecular Immunology, Brigham and Women's Hospital and Harvard Medical School, Boston, MA 02115, USA.

Journal of immunology (UNITED STATES) Oct 1 1996, 157 (7) p2932-8, ISSN 0022-1767 Journal Code: IFB

Contract/Grant No.: AI 35225, AI, NIAID; CA 40416, CA, NCI; R01 NS 24247, NS, NINDS

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Two distinct signals are required to activate T cells: an Ag-specific signal and a costimulatory signal mediated primarily by **B7**-1 (CD80) and **B7**-2 (CD86) through interactions with CD28. Costimulation appears to be critical in regulating autoreactive T cell responses. Here, we demonstrate that, in contrast to the parental uninfected T cell clone, a T cell clone infected by human T cell lymphotropic virus type I (HTLV-I) displays a remarkably enhanced response to Ag in the absence of **B7** costimulation. Chinese hamster ovary cells either transfected with DRB1*1501 (t-DR2) alone or cotransfected with DR2 and either **B7**-1 or **B7** -2 were fixed, pulsed with myelin basic protein peptide 84-102 (MBPp84-102), and used as APCs. The MBPp84-102-reactive T cell clone Ob1A12.8 required costimulation with either **B7**-1 or **B7**-2 molecules, as the response to Ag was reduced by 90% in the absence of **B7** costimulation. However, this requirement for **B7** costimulation was abrogated after productive infection by HTLV-I. Stimulation of HTLV-I-infected T cells by MBPp84-102/t-DR2 induced the secretion of IL-5 and IFN-gamma, which approached the level induced in the presence of **B7** costimulation, whereas IL-4 was induced to one third of its maximal level. Consistently, the secretion of IL-5 and IFN-gamma was not significantly inhibited by **anti**-**B7**-1 and **B7**-2 Abs, whereas IL-4 was inhibited by approximately 50%. In contrast, uninfected T cells required either **B7**-1 or **B7** -2 costimulation for significant cytokine secretion, and this response was inhibited by **anti**-**B7**-1 and **B7** -2 Abs. These findings suggest that HTLV-I-infected autoreactive T cells have the potential to induce an **autoimmune** response in the absence of **B7** expression in the target organ. This may be of particular interest in the elucidation of HTLV-I pathogenicity given the association of HTLV-I infection with **autoimmune**-like diseases.

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pppp    ggggg
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8/1/01

Record Date Created: 19961125

21/7/36 (Item 6 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09009028 96413236 PMID: 8816398
B7 costimulation and autoantigen specificity enable B cells to activate autoreactive T cells.
Roth R; Nakamura T; Mamula MJ
Department of Medicine, Yale University School of Medicine, New Haven, CT 06520-8031, USA.
Journal of immunology (UNITED STATES) Oct 1 1996, 157 (7) p2924-31, ISSN 0022-1767 Journal Code: IFB
Contract/Grant No.: AI36529, AI, NIAID; AR41032, AR, NIAMS
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
This study examines the role of B cells as auto-APCs in activating **autoimmune** T cells responses. Mice immunized with their own cytochrome c (cyt c) elicit no detectable B or T cell responses. However, mice first primed with a cryptic self peptide, mouse cyt c 81-104, followed at 3 wk with a boost of whole cyt c, elicit autoreactive T cells specific to self cyt c. T cell **autoimmunity** is not elicited in similarly immunized B cell-deficient (mu MT) mice. The expression of the **B7**-2 and/or **B7**-1 costimulatory molecules, as well as specificity to a self Ag, cyt c, enabled B cells to activate T cells to proliferate and to express IFN-gamma, IL-4, IL-5, and IL-10 cytokine mRNAs. In contrast, neither adoptively transferred **B7**- B cells nor nonspecific **B7**+ B cells were able to activate naive T cells. Moreover, **anti-B7**-2 treatment of mice prevented the in vivo expression of the IL-4, IL-5, and IFN-gamma cytokine mRNA responses. Our results suggest a major role of autoantigen-specific, **B7**-bearing B cells in breaking T cell tolerance to self Ag.
Record Date Created: 19961125

21/7/37 (Item 1 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

122212121 CA: 122(17)212121c PATENT
Monoclonal antibody against B70 molecule
INVENTOR(AUTHOR): Azuma, Miyuki; Ito, Daisuke; Yagita, Hideo; Okumura, Ko
LOCATION: Japan,
ASSIGNEE: Sumitomo Electric Industries, Ltd.
PATENT: European Pat. Appl. ; EP 643077 A1 DATE: 950315
APPLICATION: EP 94114434 (940914) *JP 93228540 (930914)
PAGES: 17 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C07K-016/28A; C12P-021/08B; C12N-005/20B; A61K-039/395B; G01N-033/577B
DESIGNATED COUNTRIES: CH; DE; FR; GB; IT; LI; SE
SECTION:
CA215003 Immunochemistry
IDENTIFIERS: monoclonal antibody B70 protein, activated B cell CD28 CTLA4 antibody, transplantation immunosuppression monoclonal antibody B70 protein , autoimmune disease chronic tonsillitis diagnosis antibody
DESCRIPTORS:
Lymphocyte,B-cell...
activated; monoclonal anti-B70 protein IgG1 inhibits binding of B70 to CD28 and CTLA-4 in activated B cell
Tonsil,disease, tonsillitis...
chronic; monoclonal anti-B70 protein IgG1 for immunotherapy in transplantation and diagnosis of autoimmune diseases and chronic tonsillitis
Antibodies,monoclonal... Autoimmune disease... Immunoglobulins,G1...

Immunosuppressants... Proteins,specific or class, b-70... Transplant and Transplantation...
monoclonal anti-B70 protein IgG1 for immunotherapy in transplantation and diagnosis of autoimmune diseases and chronic tonsillitis
Antigens,CD28... Antigens,CTLA-4 (cytotoxic T-lymphocyte-activating, 4)...
monoclonal anti-B70 protein IgG1 inhibits binding of B70 to CD28 and CTLA-4 and CD28-dependent T cell lysis of B70 presenting cells
Animal cell line,P3U1...
prepn. of monoclonal anti-B70 protein IgG1 with mouse spleen cell and myeloma cell line P3U1

21/7/38 (Item 2 from file: 399)
DIALOG(R)File 399:CA SEARCH(R)

120208593 CA: 120(17)208593z PATENT
Antibodies to cell surface molecules, their preparation, and use as therapeutics
INVENTOR(AUTHOR): De, Boer Mark; Conroy, Leah B.
LOCATION: USA
ASSIGNEE: Cetus Oncology Corp.
PATENT: PCT International ; WO 9401547 A2 DATE: 940120
APPLICATION: WO 93US6432 (930708) *US 910222 (920709)
PAGES: 114 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/06A; C12P-021/08B; C07K-015/00B; C12N-015/86B; A61K-039/395B
DESIGNATED COUNTRIES: CA; JP DESIGNATED REGIONAL: AT; BE; CH; DE; DK; ES ; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE
SECTION:
CA201007 Pharmacology
CA215XXX Immunochemistry
IDENTIFIERS: monoclonal antibody cell surface antigen, CD40 B7 monoclonal antibody therapeutic
DESCRIPTORS:
Cell membrane...
antigens of, monoclonal antibodies to, prepn. of
Antigens,surface...
cell, monoclonal antibodies to, prepn. of
Insect...
cells of, surface of, expression on, of gene for surface antigens
Transplant and Transplantation,graft-vs.-host reaction...
control of, monoclonal antibodies to antigen B7 for
Immunoglobulins,E...
immune diseases mediated with, treatment of, anti-CD40 monoclonal antibodies for
Corticosteroids,uses...
immuno-suppressant, transplantation rejection remedy contg. anti-B7 antibodies and
Inflammation inhibitors...
monoclonal antibodies to antigen B7 for
Antigens,B7/BB-1... Antigens,CD40...
monoclonal antibodies to, prepn. of
Transplant and Transplantation...
rejection of, control of, monoclonal antibodies to antigen B7 for
Immunosuppressants...

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7B6S	0
B7$	0
B7.DWPI,EPAB,JPAB,USPT,PGPB.	8498
B7A.DWPI,EPAB,JPAB,USPT,PGPB.	40
B7AA.DWPI,EPAB,JPAB,USPT,PGPB.	1
B7AA840.DWPI,EPAB,JPAB,USPT,PGPB.	1
B7AUG.DWPI,EPAB,JPAB,USPT,PGPB.	1
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ANTIBOD$(ANTIBODY-ST38.2).USPT,PGPB,JPAB,EPAB,DWPI.	pickup term
((7C10 OR 7B6) SAME (B7$ OR ANTIBOD$ OR HYBRIDOMA$)SAME (EPITOPE$)).USPT,PGPB,JPAB,EPAB,DWPI.	3

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DB Name	Query	Hit Count	Set Name
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USPT,PGPB,JPAB,EPAB,DWPI	L1 and (b7$)	3	L2
USPT,PGPB,JPAB,EPAB,DWPI	anderson-darrell$	12	L1